

Southern Metropolitan Regional Council  
**WASTE AUDITS Contract 2012-001809-1 (Audits)  
FINAL Report**

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## Project research reports referenced

- Hyder, SMRC Seasonal waste audit results Sep 2013 – April 2014 (August 2014)
- Catalyse, 2014 SMRC Research Report Recycling (June 2014)
- Catalyse, Improving waste behaviour - qualitative research findings (December 2014)

## **1. Project Description**

Recycling bin audits conducted by SMRC indicated that 50% of the households were filling their recycling bin to capacity each fortnight. In addition, whole of waste stream audits showed that 39% of the total recyclables in the domestic waste stream are being lost to the MSW bin. Following this, SMRC conducted a trial weekly recycling collection service on a representative group of 300 residents in the City of Cockburn in 2007. Member councils considered implementation of weekly recycling collections after the trial showed that an additional 50% of recyclables could be captured.

The City of Cockburn implemented weekly recycling in January 2011 and the Town of East Fremantle commenced the weekly collections from October 2012. The City of Melville started weekly collections in July 2013.

The overall aim of the project was to assess the impact of weekly recycling on the City of Cockburn to provide an updated and comprehensive cost benefit analysis to other councils considering adopting weekly recycling.

The objectives of the project included measurement of:

- co-mingled recyclables recovered;
- recyclables diverted from the MSW bin; and
- any corresponding increase or decrease in MSW.

The financial impact and potential cost benefits of introducing the weekly collection of recyclables was assessed.

The attitudes and behaviours of residents were surveyed regarding:

- separation of their waste and recycling;
- frequency of waste and recycling collections; and
- volumetric capacity of the recycling services and numbers and types of receptacles provided.

## **2. What was done**

Detailed audits were conducted to ascertain the performance and cost benefits of the increased collection frequency on the established system in Cockburn and the newly implemented system in Melville.

The audit covered a representative group of 130 households within the City of Cockburn and another representative group of 110 households within the City of Melville.

Concurrently, the SMRC undertook a householder survey of 708 households across the region to determine their current attitudes and behaviours in relation to weekly recycling and collection.

The audits involved a total of 240 households receiving a weekly collection of recyclables. The first audit occurred in the spring of 2013 followed by a second audit six months later in the autumn 2014 period. This approach provided a robust sample for statistical purposes and identified any seasonal effects over the year.

A random number generator was used to generate random samples of households within the cities of Cockburn and Melville.

After selection of the sample households, the MSW and recycling bins were audited in a detailed contents characterisation audit.

A community survey of 708 households across the region was conducted following the implementation of the weekly collections in all three councils including the cities of Cockburn and Melville and the Town of East Fremantle. Captured information included attitudes and behaviours of a broad cross section of the regional community towards waste management in their homes and the efficiency and suitability of the systems for collection of their waste and recyclables.

Follow up qualitative research was conducted to further investigate:

- motivators and barriers for the correct disposal of cans, tins and glass, including broken glass;
- attitudes towards bin capacity and bin audits;
- reasons for supporting or opposing a three bin system; and
- ways to improve the effectiveness of communications.

Three focus groups were facilitated including SMRC Community Advisory Group (CAG), residents who behave more sustainably and residents who behave less sustainably. Supplementary in-depth interviews were facilitated with five teenagers across the SMRC region.

The relative amounts of material disposed in the recycling and waste streams was monitored for comparison of recycling performance and waste generation rates between different council areas implementing the weekly collection service.

### **3. Aim**

Assess the impact of weekly recycling on the City of Cockburn to provide an updated and comprehensive cost benefit analysis to other councils considering adopting weekly recycling.

### **4. Objectives**

#### **4.1 Measure the increase in co-mingled recyclables recovered.**

Following the introduction of weekly recycling in the City of Cockburn in January 2011 there was a marked increase in the annual tonnage of recyclables collected when comparing the 2010 calendar year to the 2011 calendar year. In 2010 the total recyclables collected was 10,444 tonnes compared to 12,677 tonnes in 2011. This equated to an increase of 2,233 tonnes or 21.4%.

The Town of East Fremantle and City of Melville introduced weekly collections in October 2012 and July 2013 respectively. The response in terms of tonnages collected was not as marked as that in the City of Cockburn with initial year on year increases of 11.3% and 7.0% in the East Fremantle and Melville areas, respectively. In 2014 this increased further in Melville to 9.3% or 1,078 tonnes per annum.

A drop in tonnages was observed in East Fremantle after 2013 and after 2014 in Melville. The City of Cockburn maintained some growth in tonnages after implementation in 2011 before flattening out from 2013 to 2015 despite continued population growth. This may be related to an overall reduction in total waste collected per capita across all member councils as discussed and charted in section 4.2 of this report.

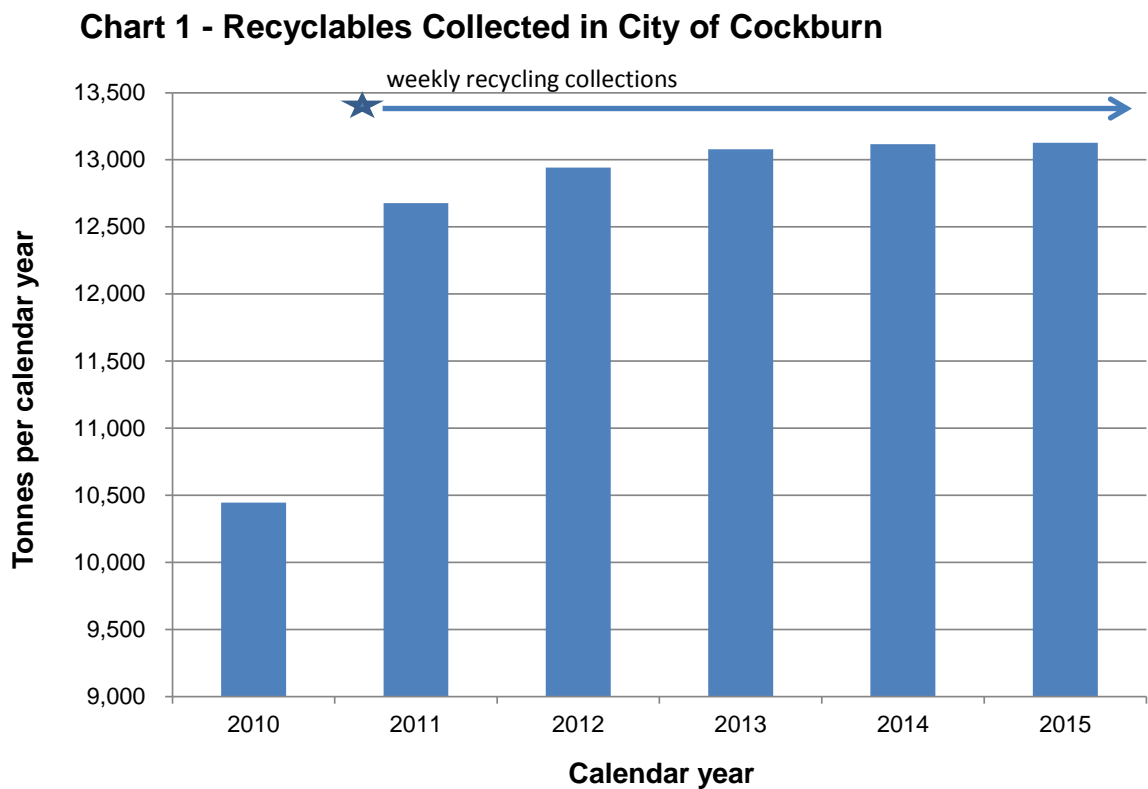
Recyclables collected in the other two member councils that maintained fortnightly collections have been relatively flat during the implementation of weekly recycling.

The City of Fremantle has consistently collected around 3,600 tonnes per year and The City of Kwinana saw a slight rise from 3,000 up to 3,200 over the four years from 2011 to 2015.

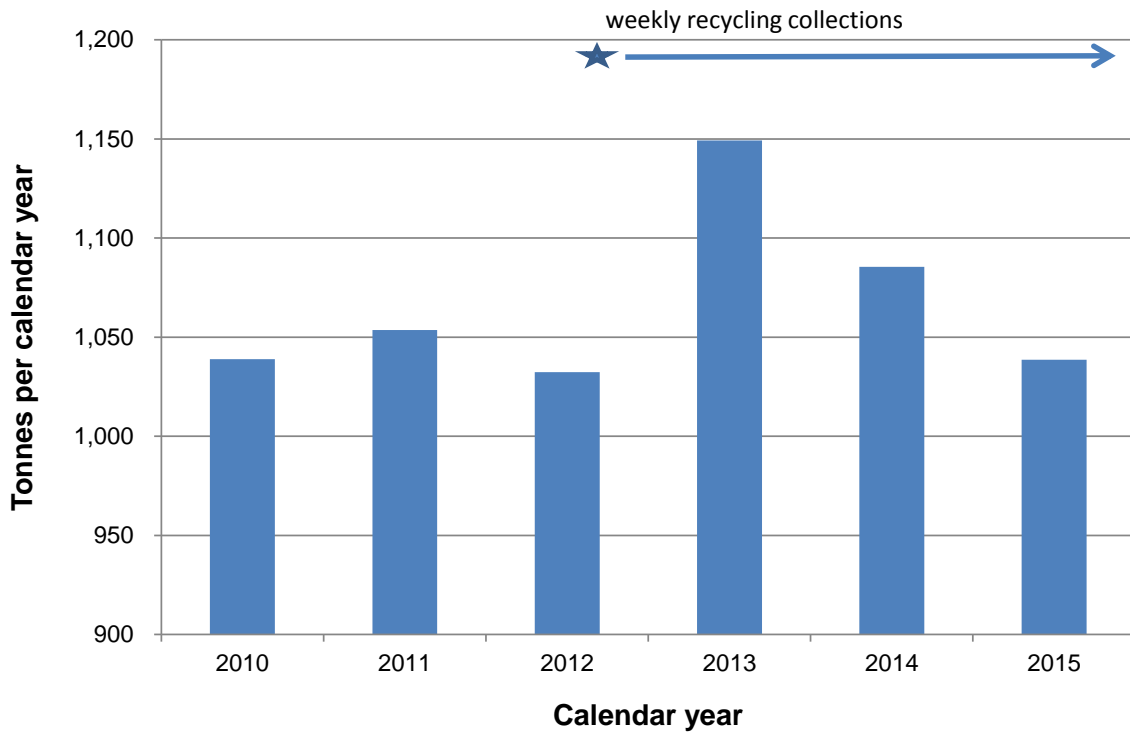
During the same period population growth in Fremantle averaged 2.5% per annum and in Kwinana there was significant population growth averaging 5.5% per annum representing a 22.2% total cumulative increase.

This disconnect between population growth and generation of recyclables has been observed across all member councils since 2013.

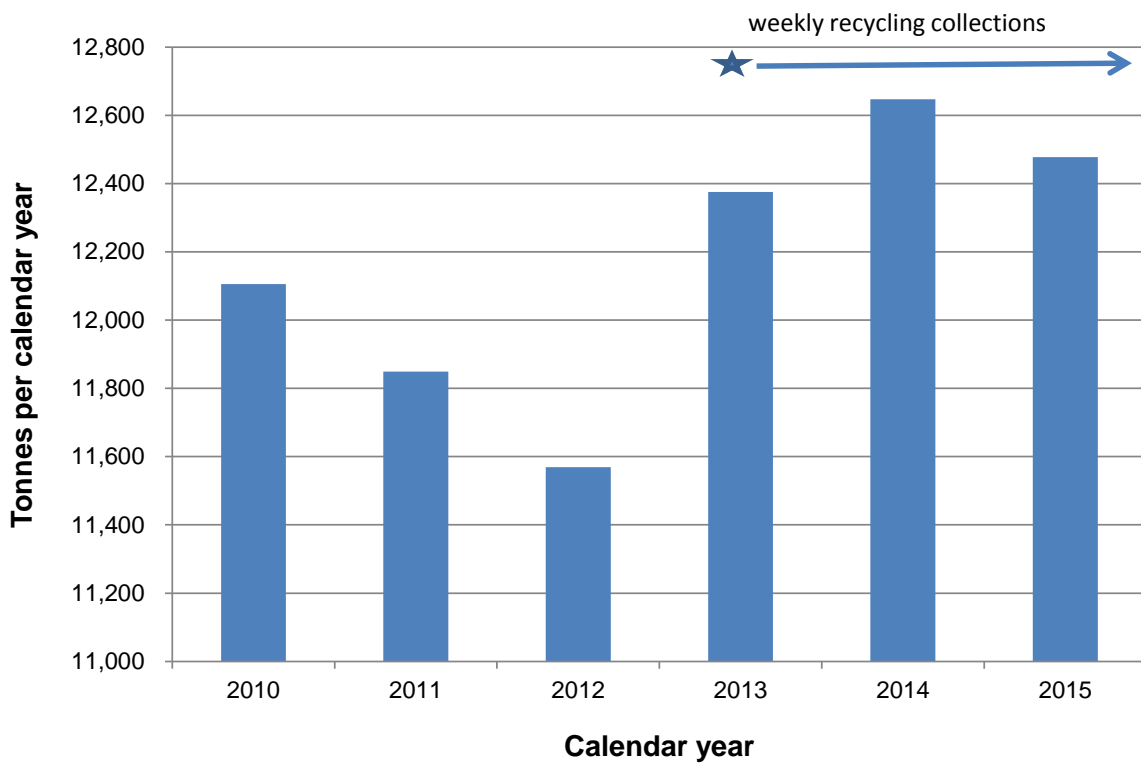
The recyclables tonnages collected before and after the introduction of weekly recycling are shown in charts 1 to 3 below.



**Chart 2 - Recyclables Collected in Town of East Fremantle**



**Chart 3 - Recyclables Collected in City of Melville**



Leading up to and after the introduction of weekly recycling annual population growth rates in the City of Cockburn averaged 3.9% and have been consistently within the range of 3% to 5%, however, the increase in weekly recycling in 2011 did not correspond to any sharp increase in population.

Similarly, there were no corresponding significant changes in population growth in the other two council areas.

The ABS statistics for the average annual population growth in the three councils that introduced weekly recycling is shown in table 1 below.

<b>Table 1 - recent population growth</b>						
<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>City of Cockburn</b>						
<b>Population</b>	88,935	91,628	95,036	98,990	103,351	106,540
<b>Annual growth</b>	4.8%	3.0%	3.7%	4.2%	4.4%	3.1%
<b>Town of East Fremantle</b>						
<b>Population</b>	7,244	7,270	7,443	7,587	7,735	7,831
<b>Annual growth</b>	1.3%	0.4%	2.4%	1.9%	2.0%	1.2%
<b>City of Melville</b>						
<b>Population</b>	99,882	100,764	102,135	104,393	106,371	107,239
<b>Annual growth</b>	1.3%	0.9%	1.4%	2.2%	1.9%	0.8%
<b>All three Councils on weekly collections</b>						
<b>Population</b>	196,061	199,662	204,614	210,970	217,457	221,610
<b>Annual growth</b>	2.8%	1.8%	2.5%	3.1%	3.1%	1.9%
<i>Source: ABS region summary (estimated resident population)</i>						

#### **4.2 Measure the amount of recyclables diverted from the MSW bin and measure if there is a corresponding decrease in MSW.**

As stated previously, in the calendar year immediately following the introduction of weekly recycling an additional 2,233 tonnes of recyclables were collected in the recycling stream within the City of Cockburn.

For the City of Cockburn the amount of MSW collected increased marginally in 2011 and then reduced in 2012 to below pre weekly recycling levels. There was an unexplained increase in MSW collected in 2013 which was maintained in 2014.

Reasons speculated for the increased MSW include:

- high growth in new households with new residents entering the municipality requiring additional communications effort regarding recycling; and
- bias towards non-recycling stream waste types being generated by new arrivals building and fitting out new houses and establishing gardens.



From 2013 there has been an across the board reduction in total kerbside MGB waste collected in all member councils.

The total kerbside materials collected in MGB's is shown in table 2 below.

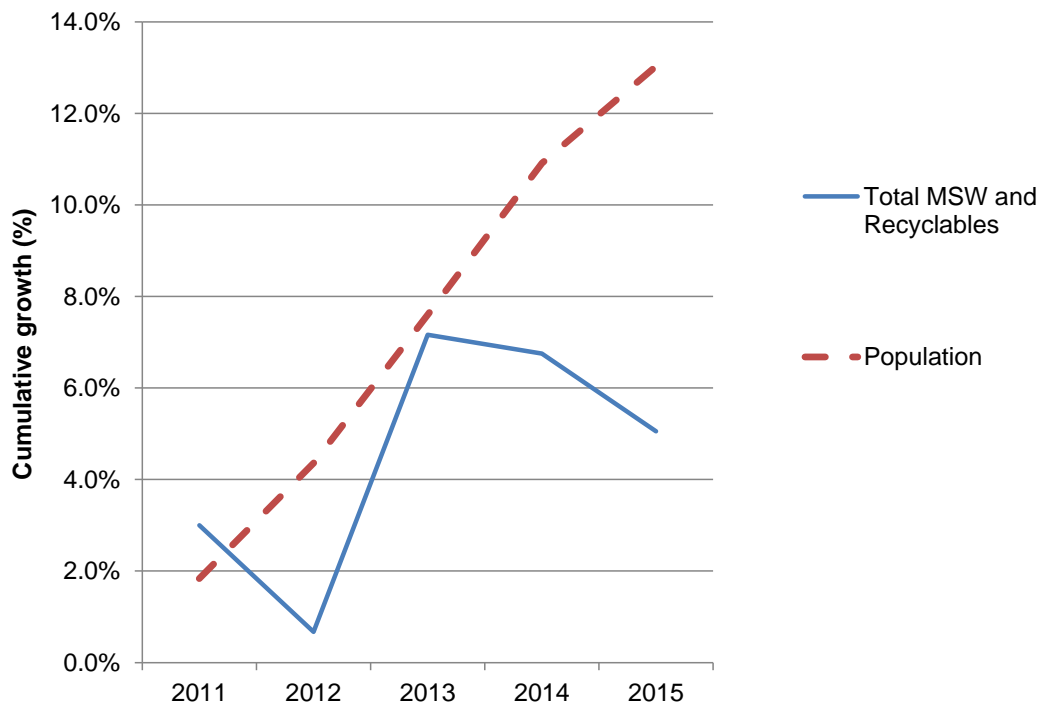
<b>Table 2 - total kerbside materials collected in MGB streams</b>						
<b>Year</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>City of Cockburn</b>						
Recyclables collected	10,444	12,677	12,942	13,079	13,118	13,127
MSW collected	27,484	27,792	27,304	29,083	29,174	28,441
<b>Total collected</b>	<b>37,928</b>	<b>40,469</b>	<b>40,245</b>	<b>42,162</b>	<b>42,291</b>	<b>41,568</b>
<b>Town of East Fremantle</b>						
Recyclables collected	1,039	1,054	1,032	1,149	1,086	1,039
MSW collected	2,347	2,468	2,490	2,847	2,562	2,489
<b>Total collected</b>	<b>3,385</b>	<b>3,521</b>	<b>3,522</b>	<b>3,997</b>	<b>3,647</b>	<b>3,527</b>
<b>City of Melville</b>						
Recyclables collected	12,105	11,849	11,569	12,375	12,647	12,478
MSW collected	31,323	31,445	29,972	32,278	31,877	31,452
<b>Total collected</b>	<b>43,429</b>	<b>43,294</b>	<b>41,542</b>	<b>44,653</b>	<b>44,524</b>	<b>43,930</b>
<b>All three Councils on weekly collections</b>						
Recyclables collected	23,588	25,580	25,543	26,604	26,850	26,643
MSW collected	61,154	61,705	59,766	64,208	63,612	62,382
<b>Total collected</b>	<b>84,743</b>	<b>87,284</b>	<b>85,309</b>	<b>90,811</b>	<b>90,462</b>	<b>89,025</b>

In the four years following the introduction of weekly recycling the overall growth in total tonnage has been less than overall population growth and therefore there has been a measurable decrease in waste generation per head of population.

There is a distinct separation of the connection between waste generation rates and population growth after 2013.

This is clearly illustrated in the following chart 4 comparing cumulative population growth against total cumulative tonnes collected in the MSW and recycling streams for the three councils on weekly recycling.

**Chart 4 - comparison of total growth in MSW and Recyclables to population growth (all three councils on weekly recycling collections)**

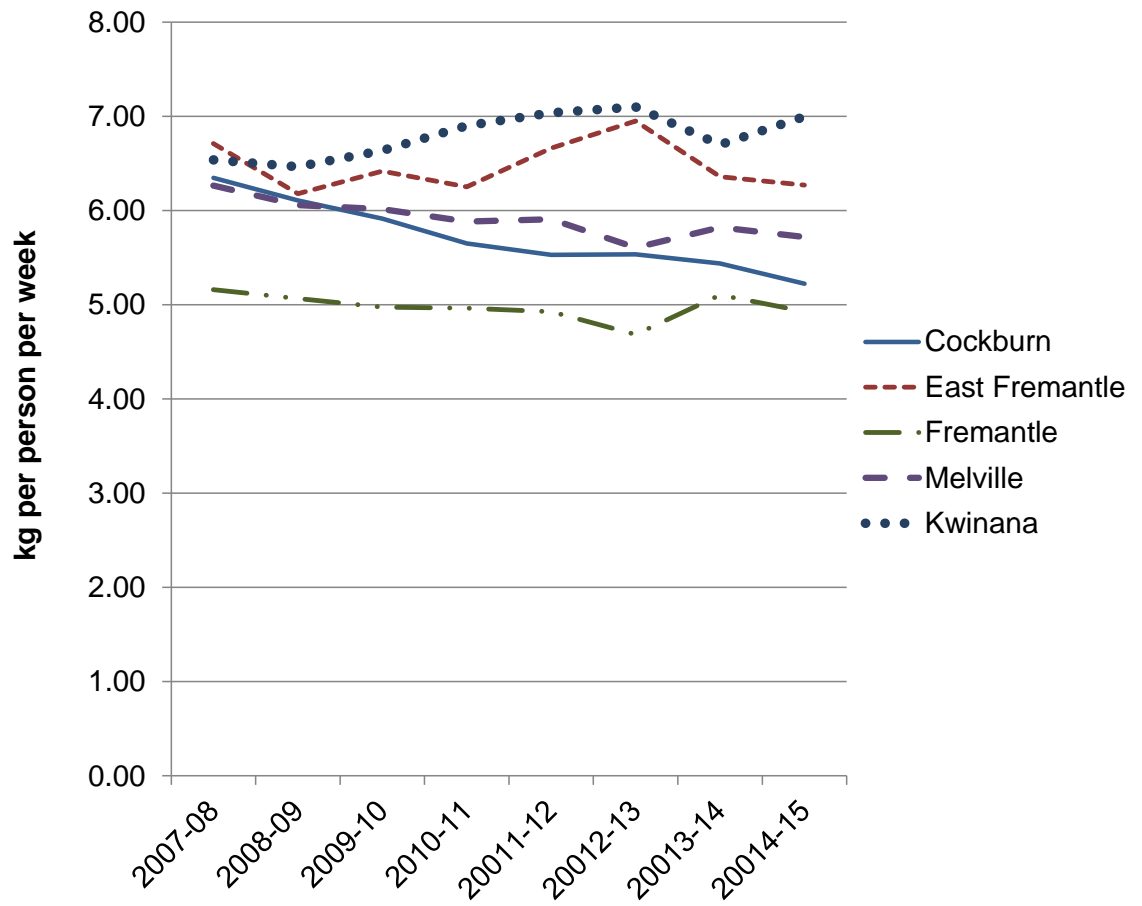


The loss of connection between population growth and waste generation has been observed across all five SMRC member councils.

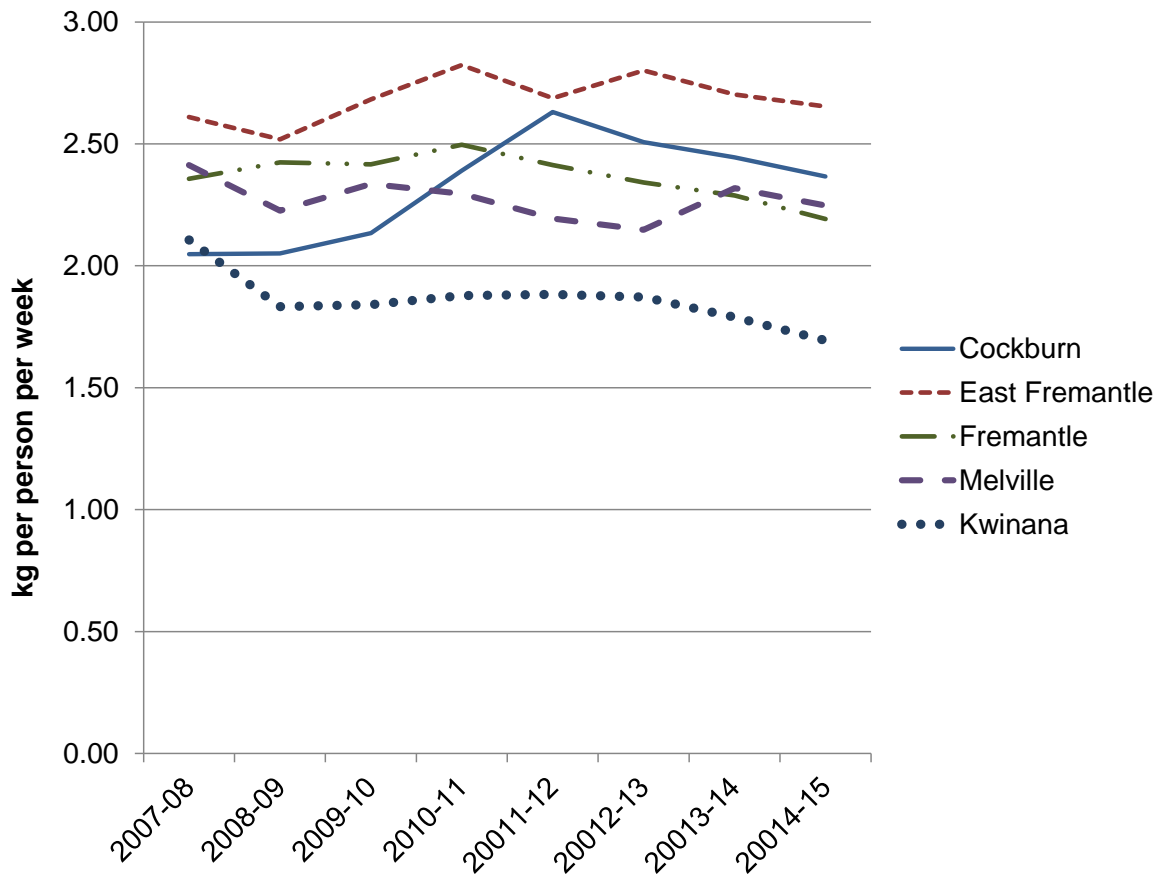
The following charts 5 to 7 show a uniform drop off in waste generation rates per capita since 2013.

The only noticeable exception is an increase in MSW tonnage per capita within the City of Kwinana which has had a very high population growth rate of between 5% to 6% per annum in recent years.

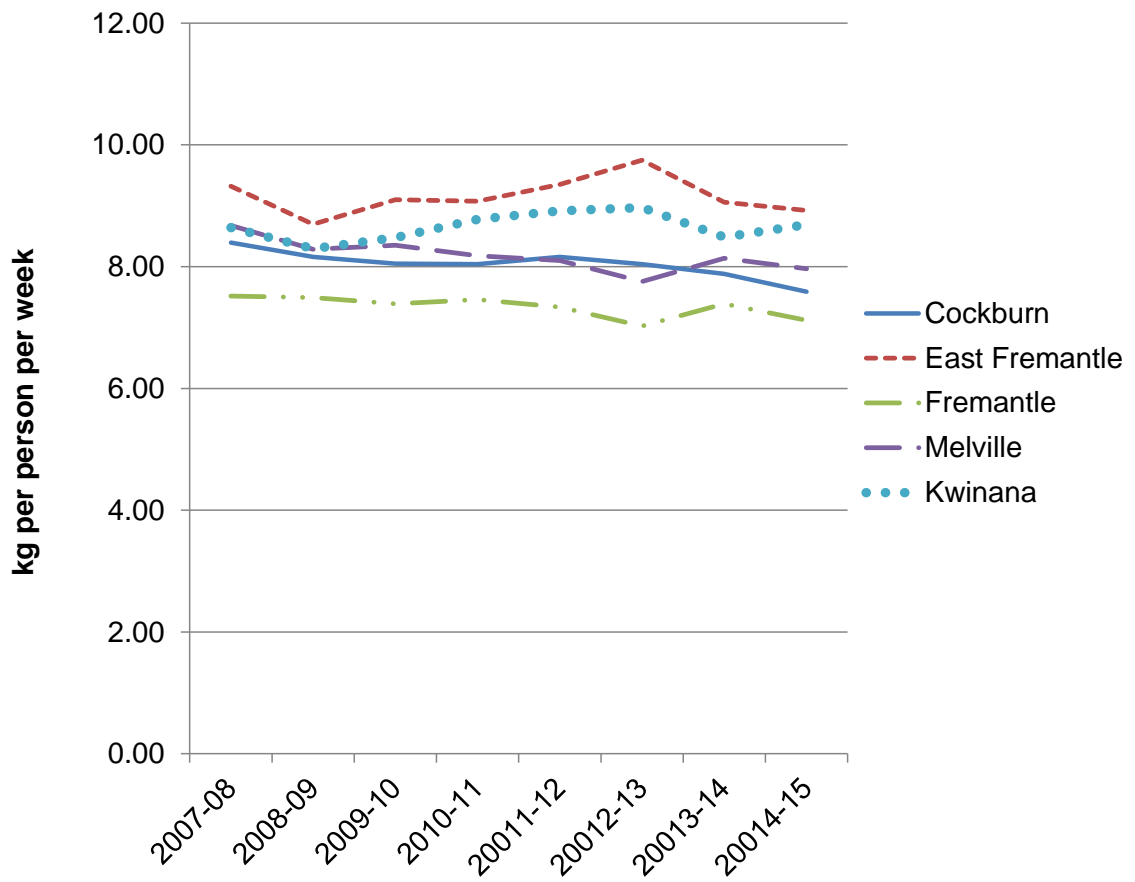
**Chart 5 - MSW collected per capita**



**Chart 6 - Recyclables collected per capita**



**Chart 7 - Total MSW & Recyclables collected per capita**



In the City of Cockburn the proportion of total MSW and recyclables diverted to the recycling bin increased from 27.5% prior to the weekly collections up to 32.2% in 2012. In 2013 and 2014 the proportion collected in the recycling stream levelled off at 31.0%.

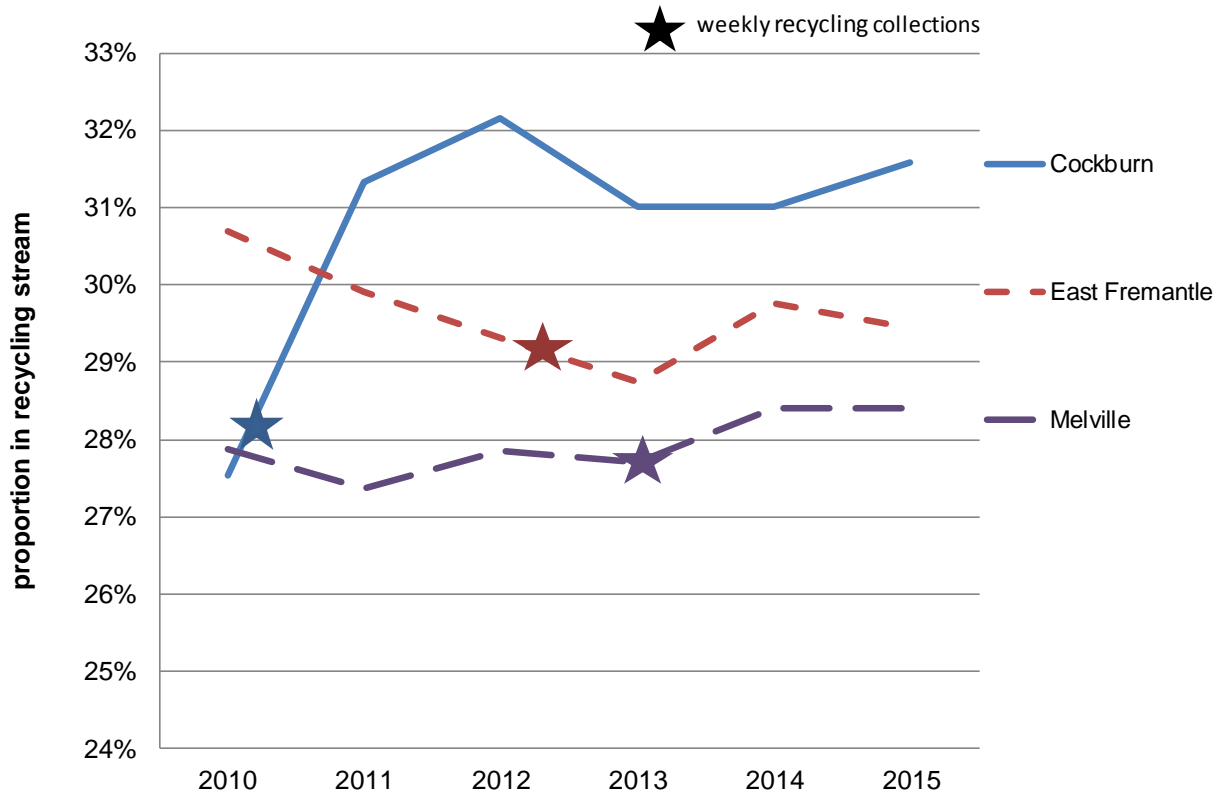
The City of Melville had a similar proportion of recyclables in the recycling bin as Cockburn in 2010 at 27.9%. This increased slightly after the introduction of weekly recycling to 28.4% in 2014 and 2015.

An overall opposite trend occurred in the Town of East Fremantle with the proportion dropping from a high of 30.7% in 2010 down to 29.4% in 2015. There had been a steady decline in East Fremantle leading up to and after initial introduction of weekly recycling collections and therefore there has subsequently been an actual increase after the introduction of weekly recycling compared to a low in 2013.

Chart 8 below shows the ratio of total kerbside waste placed in the recycling stream graphically for each of the three councils.

The overall impact appears to show that following the introduction of weekly recycling material has moved out of the MSW bin into the recycling bin.

**Chart 8 - Proportion of total kerbside MGB waste in recycling stream**



### Audit report

The increased collection frequency appeared to improve the recycling recovery rate, however, there is potential to improve recovery rates further as not all households are fully optimising the use of the bin capacity available.

This is shown in table 3 which extrapolates the audits conducted on the Cities of Melville and Cockburn across the region showing the composition split between the recycling and MSW streams. Paper and cardboard and glass are achieving a relatively high recovery rate compared to metal and plastic containers which are at or below a 50% recovery rate.

The extrapolation shows an estimated 12,000 tonnes of recyclables across the region being placed into the MSW bin, excluding the “plastic other” category. This would equate to a potential increase of 35.4 % to the existing recyclables tonnage collected if separated correctly by residents.

In the absence of weekly recycling, or other capacity boosts, this points to an underlying capacity issue if there is a significant positive change in resident behaviour leading to a much higher proportion of recyclables being collected in the correct stream.

Table 3 - Average audit results applied across all five Councils				
Period: financial year 2013-14				
MSW	Tonnes per annum	RECYCLING	Tonnes per annum	Recycling Stream Capture Rate
Food Waste	22,161	Food Waste	971	
Green Waste	28,366	Green Waste	396	
Paper and Cardboard	5,602	Paper and Cardboard	15,370	73%
Other Calorific	8,864	Other Calorific	1,326	
Other Inert	9,860	Other Inert	2,608	
Glass	2,829	Glass	8,811	76%
Plastic Other	2,294	Plastic Other	626	
Plastic Containers	2,498	Plastic Containers	2,514	50%
Steel Containers	475	Steel Containers	452	49%
Other recoverables	530	Other recoverables	429	
Aluminium Containers	519	Aluminium Containers	358	41%
Total Tonnes per annum	83,996	Total Tonnes per annum	33,861	

#### 4.3 Based on the trial results, measure the financial impact and potential cost benefits of introducing the weekly collection of recyclables.

An assessment of cost impacts was carried out to predict the potential cost benefits of introducing weekly recycling. The costs include the direct collection and processing cost only.

The following assumptions were made.

**Business as usual (BAU)** is weekly collection of MSW processed at waste composting facility (WCF) and fortnightly collection of recyclables processed at materials recovery facility (MRF).

The impact of the change in total collection tonnages on average collection costs was assumed to be neutral between the two streams.

Potential savings from reduced bulk green waste collection costs were not included (ie resulting from the additional capacity freed up in the MSW bin being used for green waste disposal).

#### Collection costs

MSW Weekly \$52.00 per household per year.

Recycling Fortnightly \$26.00 per household per year.

Recycling Weekly \$52.00 per household per year.

#### Processing Costs

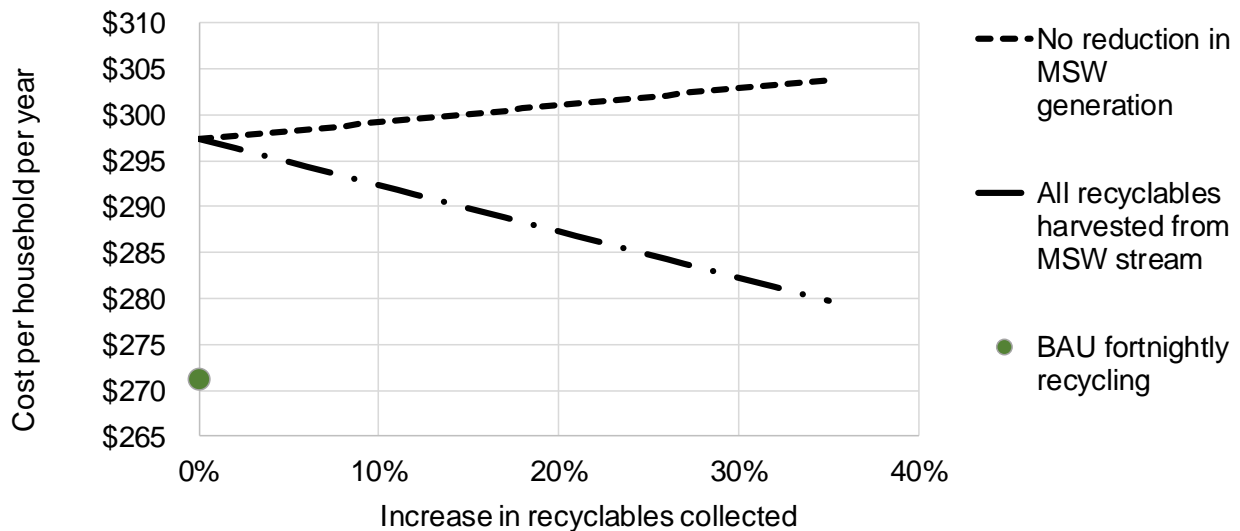
MSW to SMRC waste composting facility \$240.00 per tonne.

MSW to SMRC materials recovery facility \$65.00 per tonne.

The following chart 9 shows the estimated cost impacts of weekly recycling.

**Chart 9 - Cost impacts of weekly recycling**

(includes total cost of collection and processing for MSW and REC streams)



The results show that the additional cost of collecting weekly can be partially offset by diverting recyclables from the WCF to the lower cost MRF. In order to fully offset the additional collection cost there would need to be a significant increase in the amount of recyclables collected to 52%.

Based on audit results there are an additional 12,000 tonnes of recyclables available in the MSW bin which would result in a 38% increase in the recyclables collected if correctly separated by residents.

Referring to chart 9 an increase of 20% in recyclables collected is predicted to offset around \$10.00 per year per household or 35% of the additional \$26.00 per year of collection costs. This applies to the scenario whereby all of the additional recyclables collected are harvested from the MSW stream with a corresponding reduction in MSW tonnages.

In the case of there being no reduction in the amount of MSW collected despite an increase in recyclables collected there is no offset of the additional collection costs.

A nil reduction in MSW could be attributed to residents utilising the space freed up in their MSW bin to dispose of waste that had previously been disposed elsewhere. This could include, for example, garden waste that was previously:

- disposed in the home garden or compost bin;
- removed by a garden bag contractor; or
- taken to a transfer station or green waste facility.



#### **4.4 Survey the attitudes and behaviours of residents regarding the separation of their waste and recycling, frequency of waste and recycling collections, volumetric capacity of the recycling services and numbers and types of receptacles provided.**

In May-June 2014 the SMRC administered a recycling survey among local SMRC residents. The purpose of the survey was to evaluate community attitudes and behaviour relating to waste and recycling. The survey was conducted by phone with 708 randomly selected residents aged 18+ years.

##### **Weekly recycling awareness**

Awareness of the shift to weekly recycling is fairly high (79% in Melville, 71% in Cockburn and 67% in East Fremantle), while awareness of the availability of larger 360 litre bins is moderate (28% in Fremantle).

The shift to providing weekly collections has had a positive impact on satisfaction levels, however, self-reported increases in the amount of items being recycled appears to be driven by other factors, with residents in the City of Kwinana most likely to say they have increased the amount of items being recycled, followed by the City of Cockburn.

##### **Weekly recycling behaviours and attitudes**

Overall, 63% of residents put their recycling bin out for collection on a weekly basis. Naturally this is higher where the service is offered, with most frequent use in the City of Cockburn. Around 8% reported overfilling their recycling bin. This is more likely among families and in areas offering fortnightly collections.

Most people are happy with the service, with 84% rating satisfaction 8-10 out of 10. Satisfaction is lower among younger singles / couples, apartment dwellers, and in areas that offer fortnightly collections (cities of Fremantle and Kwinana).

95% of residents put their rubbish bin out for collection on a weekly basis. Only a small minority overfill their bin. This is slightly higher in the City of Fremantle and among renters.

##### **Third bin for organics attitudes**

There is relatively strong support for introducing a third bin for organic waste so that garden and food waste can be separated and turned into higher quality compost and with fewer contaminants than with the current two bin system.

79% of residents think councils should provide households with a third bin for garden and food waste and 77% would like a third bin for their own home if they were available.

Among those who would like a bin, 83% would pay \$12 per year, 77% would pay \$25 and 58% would pay \$50. There is greatest support among younger singles and couples versus lowest support among seniors.

The main barriers for those who don't want a third bin are:

- not enough organic waste (36% of respondents);
- do own composting / use in garden (22%);
- would increase council rates (15%);

- not enough space to store a third bin (13%); and
- not enough space on verge for a third bin (8%).

### **Focus Groups**

The research found that residents are interested and willing to behave sustainably, however, there are some performance and knowledge gaps.

Follow up qualitative research was requested to further investigate:

- motivators and barriers for the correct disposal of cans, tins and glass, including broken glass;
- attitudes towards bin capacity and bin audits;
- reasons for supporting or opposing a three bin system; and
- ways to improve the effectiveness of communications.

Three focus groups were facilitated. One with the SMRC's Community Advisory Group (CAG), one with residents who behave more sustainably and one with residents who behave less sustainably.

When asked about increasing capacity by forming new habits when processing recycling items in the home residents were open to squishing steel tins with the lids inside, with some already doing this. Residents were not open to bundling similar types of recycled materials (such as placing paper inside cardboard cartons) before taking it out to the recycling bin due to indoor space constraints and wanting to clear unwanted items from their homes quickly. There were also questions about whether this was the right thing to do to support the sorting process.

Overall, reaching full capacity with recycling bins didn't seem to be of great concern. Residents were more concerned about overfilling general waste bins with green waste.

## **5. Assessment of Outcomes**

The increase in tonnage seen in the City of Cockburn has been maintained for the five years since introduction of weekly recycling in January 2011. Compared to 2011 recycling collections of 10,444 tonnes a total of 12,677 tonnes were collected in 2012 representing an additional 2,233 tonnes or 21.4%. This increased to 12,942 tonnes in 2015. Over the five years an additional 12,721 tonnes have been collected.

A proportion of the additional tonnage may be attributed to increases in population which averaged 3.9% per year for the same period, however, the initial sharp increase in 2011 did not correspond to any sudden change in population.

The tonnages of MSW collected increased marginally over the same period from 27,484 in 2011 to 28,441 in 2015 which equated to a total of 4,372 tonnes additional over the five years or a third of the increase in recyclables generation.

The overall generation rate of total MSW and recyclables declined from 8.04 kg per person per week to 7.59 kg per person per week over the same five years. This can be attributed to a decline in the generation rate of MSW whereas recyclables were steady overall from

2.39 kg per person per week to 2.37 kg per person per week with a peak of 2.64 kg per person per week in 2011-12.

The proportion of total kerbside MGB waste in the recycling stream increased significantly after the introduction of recycling in the City of Cockburn from 27.5% to a peak of 32.2% in 2012 and has averaged 31.4%.

Increases in recyclables collected were also observed in the Town of East Fremantle and City of Melville. In the City of Melville the introduction of weekly recycling in July 2013 appeared to arrest a three year decline in tonnages collected. The 11,569 tonnes collected in 2012 increased by 9.3% to 12,647 in 2014. Population growth in Melville averaged 2.1% over the same two years.

The Town of East Fremantle experienced an initial increase in annual tonnage of 11.3% from 1,032 in 2012 to 1,149 tonnes in 2013. The annual recyclables tonnage declined to 2012 levels by 2015.

During the five years from 2011 to 2015 the Town of East Fremantle had the highest recyclables generation rate of member councils of between 2.65 to 2.82 kg per person per week. The City of Cockburn's generation rate increased from a low of 2.13 in 2010 to a peak of 2.63 kg per person per week in 2012 which was attributed to the introduction of weekly recycling.

The Town of East Fremantle had a general decline in total kerbside collected waste after the introduction of weekly recycling in 2012 mainly attributed to MSW generation which decreased from 9.07 down to 8.92 kg per person per week in 2015.

The overall increase in recyclables collected following the introduction of weekly recycling in the three councils amounted to 15,690 tonnes over the five years.

For the 2013 to 2015 period after all three councils had transitioned to a weekly collection system the recyclables tonnage was 14.3% higher on average compared to 2012 levels. Adjusted for the average 2.5% annual growth in population the net recyclables increase was estimated to be 11.8% above 2013 levels.

This average increase in recyclables equated to an offset of \$6.00 per household per year to the additional cost of providing the weekly collections or 23% of the estimated \$26.00 per household per year. Savings from reduced bulk green waste collection was not factored into this calculation.

Surveys of residents indicated a willingness to pay for additional collection services. In the case of a third bin for organics among those who had a need for the additional service, 83% would pay \$12 per year and 77% would pay \$25. The greatest support was among younger singles and couples versus lowest support among seniors.

Most people surveyed were happy with the weekly service with 84% rating satisfaction at least 8 or above out of 10. Satisfaction was lower among younger singles and couples and apartment dwellers. In the areas that were not providing weekly collections, including the cities of Fremantle and Kwinana, there was a lower satisfaction rating.

## 6. Future directions

Based on the results from the City of Cockburn's introduction of weekly recycling SMRC expected to see an increase in recyclables collected of 10 to 15%. For the member councils of Melville and East Fremantle transitioning onto weekly recycling collections this was predicted to equate to additional recovered recyclables in the order of 2,000 tonnes per year.

The actual increases in the two transitioning councils amounted to an average of 989 tonnes per year for the period from 2013 to 2015 inclusive. The increase across the three councils was therefore mainly attributable to the improvement seen in the City of Cockburn, however, the gross increase across all three councils was measured to be 14.3%, or 11.8% adjusted for population growth, which was within the predicted range.

Since the inception of weekly collections in 2011 there has been a shift in state government policy towards three bin collection systems for the recovery of food and garden organics. In 2014 SMRC developed a new strategic waste management plan (SWMP) for the region which is planned to be adopted in June 2016.

One of the central recommendations of the SWMP is the introduction of a third bin for food and organics on a weekly collection cycle. A pragmatic approach is therefore required to be taken in relation to collection frequencies for the recycling and residuals bin.

Although SMRC has had to rethink its approach to collection services the underlying capacity issues remain for a proportion of residents. This was confirmed through the audits undertaken which continue to show that approximately one third of recyclables are being deposited in the MSW bin. With an effective education and behavioural change program this large volume of material will put pressure on the capacity provided by a fortnightly collected 240 litre MGB.

The SWMP recommends that consideration be given to reverting recycling bins to fortnightly collections with the option, if required for certain residents, that additional capacity be provided through larger capacity 360 litre MGB's.

The option of a larger 360 litre bin to residents is available in the cities of Kwinana and Fremantle and has resulted in very low uptakes (5 to 10%) and no measurable impact on overall recycling performance.

The issues of bin capacity and correct separation are related and should be addressed with a targeted campaign armed with knowledge of the types of households and demographic areas most likely to be affected.

A strong commitment to an ongoing communications strategy is therefore required to accompany any broader strategy to improve recycling performance.

## 7. Glossary

ABS	Australian bureau of statistics
BAU	business as usual
CAG	community advisory group
MGB	mobile garbage bin
MRF	materials recovery facility
MSW	municipal solid waste
REC	recyclables
SWMP	strategic waste management plan
WCF	waste composting facility

## 8. Financial report

Statement of Income & Expenditure (Excluding GST)																
Item	Detail	Provider	Funding		Preliminary Payment (received)		Milestone 1 Payment (received)		Milestone 2 Payment (received)		Milestone 3 Payment (received)		Final (this claim)		Totals	
			RFP Grant	RCG (in kind)	RFP Grant	RCG (in kind)	RFP Grant	RCG (in kind)	RFP Grant	RCG (in kind)	RFP Grant	RCG (in kind)	RFP Grant	RCG (in kind)	RFP Grant	RCG (in kind)
Salary	In house Labour	Environmental Co-ordinator	\$ 54,000		\$ 5,937		\$ 7,075		\$ 10,628						\$ -	\$ 23,640
		Exec Manager RRRRC Ops			\$ 565		\$ 674		\$ 1,215						\$ -	\$ 2,454
		Administration			\$ 170		\$ 202		\$ 364						\$ -	\$ 736
		Exec Manager Strat Proj			\$ 2,545		\$ 3,032		\$ 7,287		\$ 5,130		\$ 10,260	\$ -	\$ 28,254	
		Community Engage & Comms Officer									\$ 1,710		\$ 900			
		Creditors			\$ 170		\$ 202		\$ 364					\$ -	\$ 736	
		City of Melville Coordinators			\$ 707		\$ 842		\$ 1,265					\$ -	\$ 2,814	
		City of Cockburn Coordinators			\$ 707		\$ 842		\$ 1,265					\$ -	\$ 2,814	
Consult	Community Surveys		\$ 34,000								\$ 35,000		\$ 15,000	\$ 50,000	\$ -	
Consult	Audit Report										\$ 13,650					
Contract	Auditing Labour	Industrial People	\$ 87,200		\$ 27,000		\$ 2,393		\$ 25,665					\$ 55,058	\$ -	
Consumables	Bunnings		\$ 1,000				\$ 149							\$ 149	\$ -	
	OfficeMax						\$ 340		\$ 238					\$ 578	\$ -	
	Atom								\$ 256							
	Blackwoods								\$ 224							
Vehicle Expenses	SMRC Diesel		\$ 9,600				\$ 180		\$ 171					\$ 351	\$ -	
	Thrifty Car Rental						\$ 4,006		\$ 4,360					\$ 8,366	\$ -	
Communications - Printing & Distribution			\$ 2,200											\$ -	\$ -	
Accounting / Legal fees			\$ 1,000											\$ -	\$ -	
<b>sub Total Expenditure</b>			<b>\$ 135,000</b>	<b>\$ 54,000</b>	<b>\$ 27,000</b>	<b>\$ 10,800</b>	<b>\$ 7,068</b>	<b>\$ 12,870</b>	<b>\$ 30,914</b>	<b>\$ 22,389</b>	<b>\$ 48,650</b>	<b>\$ 6,840</b>	<b>\$ 15,000</b>	<b>\$ 11,160</b>	<b>\$ 128,632</b>	<b>\$ 64,059</b>
Funding (Agreement)					\$ 27,000	\$ 10,800	\$ 32,176	\$ 12,870	\$ 27,384	\$ 22,389	\$ 34,940	\$ 6,840	\$ 13,500	\$ 11,160		
Cumulative Funding (Agreement)					\$ 27,000	\$ 10,800	\$ 59,176	\$ 23,670	\$ 86,560	\$ 46,059	\$ 121,500	\$ 52,899	\$ 135,000	\$ 64,059		
<b>Cumulative Expenditure (ACTUAL)</b>					<b>\$ 27,000</b>	<b>\$ 10,800</b>	<b>\$ 34,068</b>	<b>\$ 23,670</b>	<b>\$ 64,982</b>	<b>\$ 46,059</b>	<b>\$ 113,632</b>	<b>\$ 52,899</b>	<b>\$ 128,632</b>	<b>\$ 64,059</b>		
% of Cashflow Projection					100%	100%	58%	100%	75%	100%	94%	100%	95%	100%		
Total Project Expenditure			\$ 189,000		\$ 37,800		\$ 57,739		\$ 111,041		\$ 166,531		\$ 192,691			
% of Cashflow Projection					100%		70%		84%		95%		97%			

## **9. Financial report certification**

I hereby certify that the Grant Funds have been used for the Approved Purpose.

A handwritten signature in black ink, appearing to read 'Tim Youe', written in a cursive style.

Tim Youe

**Chief Executive Officer**

28 April 2016