

## 2. Current Services and Operations

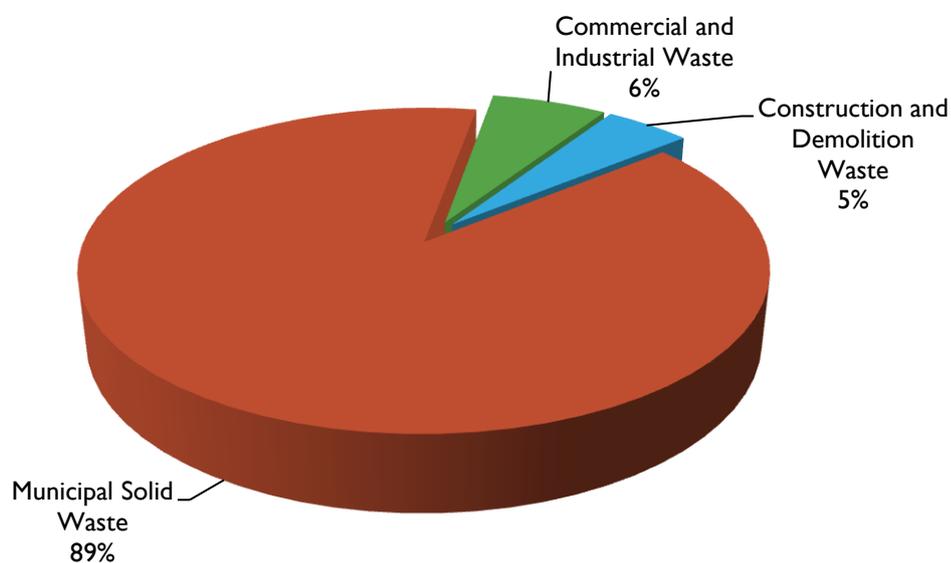
### Waste Generation

The Moreton Bay Region generated 324,500 tonnes of waste in 2015 as a result of day to day activities. This is equivalent to approximately 762 kg of waste per person per annum. Most of this waste is produced by residential properties and the remainder by businesses, Council activities and construction and demolition work. A summary of waste generation is summarised in Figure 2.

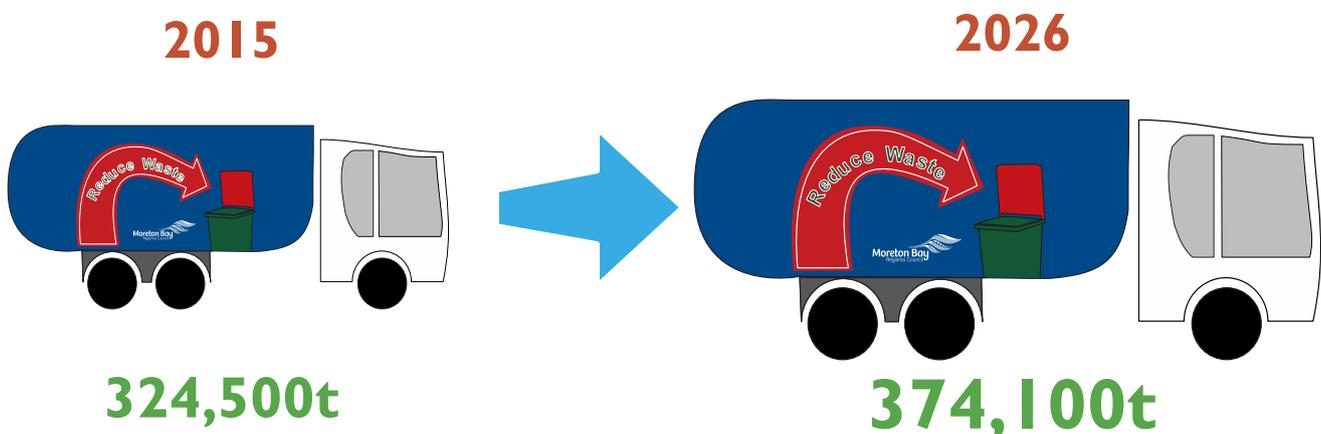
At the current rate of waste generation, by 2026, it is anticipated that waste generation in the region will reach 374,100 tonnes per annum.

To meet the waste management demands of a growing population, Council is committed to putting strategies in place to meet community expectations while at the same time reducing waste generation and promoting the recovery of resource.

**Figure 2 Summary of Waste Generation**



*Anticipated growth in the waste generated per year in the Moreton Bay Region over the next 10 years*



## Council Waste Services

Council currently provides a range of waste services to the community as described in Table 1 below and detailed further in the remainder of the section.

**Table 1: Moreton Bay Regional Council Waste Services**

**a) Waste Management Operations**

Operation of 12 waste management facilities across the region including resource recovery centres, treasure markets, transfer stations and landfills for the disposal of general waste and the recovery of recyclable waste.

**b) Kerbside Wheelie Bin Collection Services**

Kerbside collection services comprising a weekly general waste service and fortnightly recyclable waste service at residential and commercial premises across the region. Council also provide bulk industrial bins for multi-residential properties.

**c) Waste Minimisation and Education Program**

Waste minimisation and education programs including structured school, early learning centre and community involvement programs, trash to treasure tours, recycling workshops, event displays, regional recycler competitions and compost and worm farming workshops.

**d) Servicing of Public Place Bins, Butt Out Bins and Dog Bag Dispensers**

Servicing of general waste and recyclable waste public place bins including butt out bins and dog bag dispensers located on road reserves, foreshores, in parks and reserves and at community facilities.

**e) Waste Services for Council and Community Events**

Providing waste collection and cleaning services for Council and community events.

**f) Litter and Illegal Dumping**

Regular litter patrols along roads and public areas and the clean-up of illegal dumps and dead animals.



*Kerbside General Waste and Recycling Bins*

## a) Waste Management Operations

Council's waste facilities provide a diverse range of services to meet the needs of the community and assist in the recovery of resources.

The Moreton Bay Region is serviced by 4 major waste facilities, which are open 7 days a week, and 8 minor waste facilities, which are open on varying days throughout the week. Resource recovery areas and receptacles are available for residents and commercial operators to recycle items, including bulky household items, green waste, and for the disposal of general waste materials.

The range of services and materials recovered at the region's waste facilities are detailed in Table 2 below.

Council offers residents free disposal of domestic waste (subject to conditions). Customers are encouraged to reuse and recycle as much of their waste materials as possible to assist in diverting valuable resources away from landfill.

Green waste, taken to a waste facility, is chipped into mulch that can be used by residents or on Council parks and gardens.

At 30 June 2015, around 46 per cent of waste was recycled and diverted from landfill and more than 4,000 tonnes of mulched green waste was provided to residents.

Reusable items and materials are sold at the treasure markets at Caboolture and Dakabin.

**Table 2: Materials Recovery at Waste Facilities**

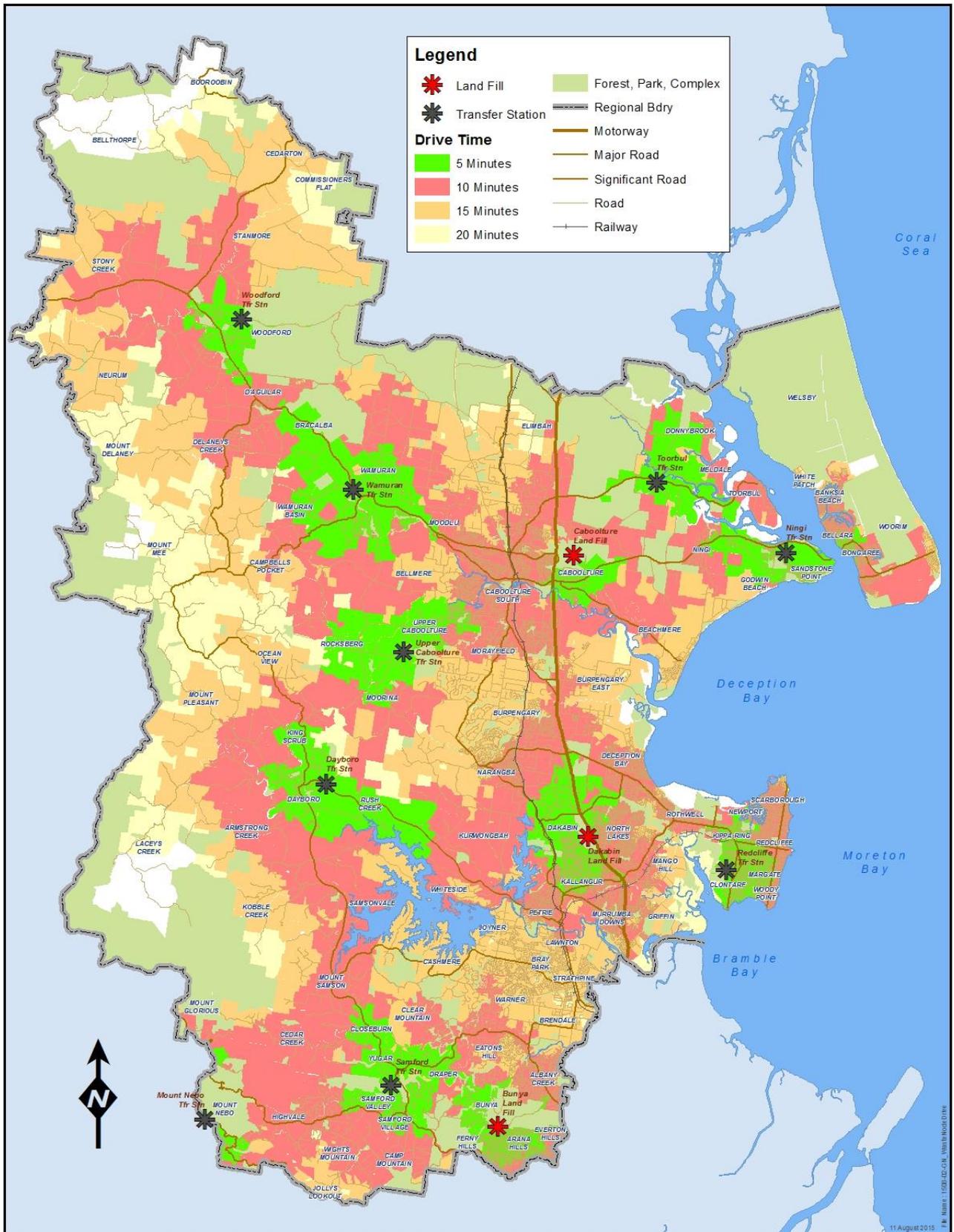
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- Domestic, commercial and industrial general waste disposal
  - Comingled recyclable waste such as rigid plastic containers and bottles, glass bottles and jars, milk and juice cartons and steel and aluminium cans
  - Paper and cardboard
  - Recovered metals (ferrous and non-ferrous metals)
  - Green Waste
  - Electronic waste
  - Household hazardous waste
  - Smoke alarms
  - Fire extinguishers
  - Used oil
  - Timber waste
  - Concrete
  - Clean fill
  - Tyres
  - Wet cell batteries
  - Gas cylinders
  - Chemical drums and containers
  - Furniture
  - Household goods
  - Clothing and textiles

Council's waste management facilities are easily accessible with over 99% of residents travelling no more than 20 minutes to their nearest facility to dispose of waste and recyclable materials. These facilities are listed in Table 3 and illustrated Figure 3.

**Table 3: Resource Recovery Centres (RRC), Transfer Station (TS) and Landfill Locations**

Location	Facility	Address
Bunya	<ul style="list-style-type: none"> <li>• Weighbridge Operations</li> <li>• Resource Recovery Centre &amp; Transfer Station</li> <li>• Landfill</li> </ul>	384 Bunya Road, Bunya
Caboolture	<ul style="list-style-type: none"> <li>• Weighbridge Operations</li> <li>• Resource Recovery Centre &amp; Transfer Station</li> <li>• Treasure Market</li> <li>• Landfill</li> </ul>	51 McNaught Road, Caboolture
Dakabin	<ul style="list-style-type: none"> <li>• Weighbridge Operations</li> <li>• Resource Recovery Centre &amp; Transfer Station</li> <li>• Treasure Market</li> <li>• Landfill</li> </ul>	336 Old Gympie Road, Dakabin
Redcliffe	<ul style="list-style-type: none"> <li>• Weighbridge Operations</li> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	261 Duffield Road, Clontarf
Ningi	<ul style="list-style-type: none"> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	1532 Bribe Island Road, Ningi
Toorbul	<ul style="list-style-type: none"> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	1105 Pumicestone Road, Toorbul
Upper Caboolture	<ul style="list-style-type: none"> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	789 Caboolture River Road, Upper Caboolture
Wamuran	<ul style="list-style-type: none"> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	1150 D'Aguilar Highway, Wamuran
Woodford	<ul style="list-style-type: none"> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	105 Golf Course Road, Woodford
Dayboro	<ul style="list-style-type: none"> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	1721 Dayboro Road, Dayboro
Mt Nebo	<ul style="list-style-type: none"> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	Mt Nebo Road, Mt Nebo
Samford	<ul style="list-style-type: none"> <li>• Resource Recovery Centre &amp; Transfer Station</li> </ul>	46 Gibbons Road, Samford

Figure 3: Map of Waste Management Facilities - Drive Time Analysis



## Landfill

Council operates three approved landfill sites where general waste, that is not recyclable or compostable, can be taken for disposal.

The projected life expectancy of the 3 landfills is estimated to be: Bunya 35 years, Caboolture 30 years and Dakabin 6 years, indicating a strong need for a plan to manage waste disposal in the region into the future.

Landfill gas is captured at the landfill sites to abate carbon emissions and produce green energy.



## Materials Recovery Facility Services (MRF)

Recyclable materials collected throughout the region by the kerbside and bulk industrial bin collection services are processed at a Materials Recovery Facility (MRF).

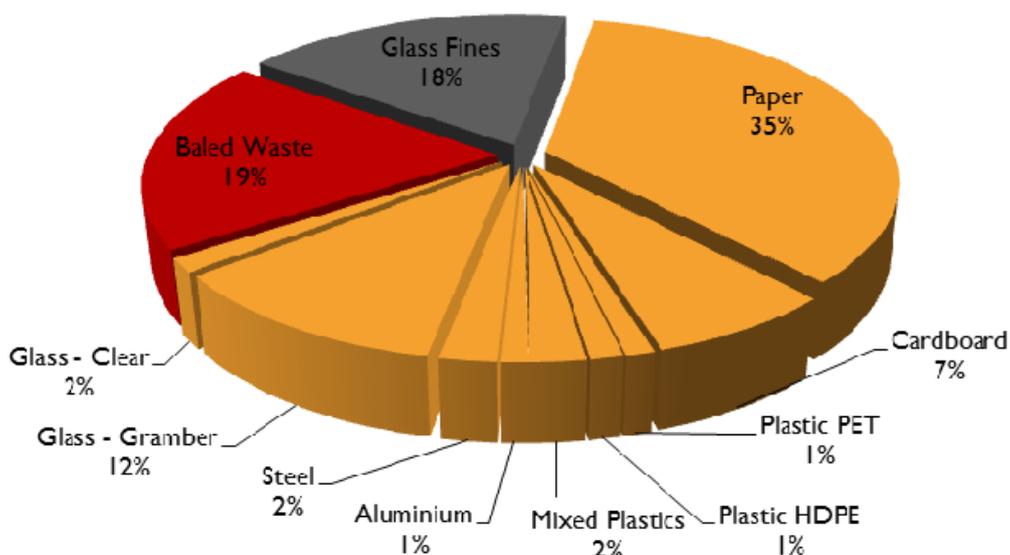
Recyclable materials accepted in kerbside wheelie bins consists of materials that are suitable for resale and reprocessing such as paper and cardboard, aluminium and steel

cans including aerosols, trays, foil, glass jars and rigid plastic containers and bottles.

Non-recyclable materials placed in the recycling stream cause processing issues at the MRF and increase costs.

In 2014/15, 19% of materials that were handled by the MRF were non-recyclable (baled) waste materials as shown in Figure 4.

**Figure 4: Recyclable statistics for 2014-2015**



## b) Kerbside Wheelie Bin Collection Services

Council offers the majority of residents in the region the convenience of a kerbside waste and recycling collection service currently provided by a designated waste management contractor. Services for general waste wheelie bins are carried out weekly for residential customers and multiple times per week for commercial properties.

The collection vehicles transport the waste materials to the landfills located within the region.

The kerbside recycling bins are serviced fortnightly and the recyclable materials are transported to a Materials Recovery Facility (MRF) for processing.

In 2015, approximately 250 new bin services were requested each month culminating in 152,585 properties being serviced within the defined waste collection area in 2015 as demonstrated in Table 4.

**Table 4: Total kerbside collection services as at 30 June 2015**

Service-Entitled Premises	Mobile Bin Sizes		Total Properties Services
	General Waste	Recyclable Waste	General Waste and Recycling
Residential	120L and 240L	240L	146,452
Commercial	240L	240L	6,133
Council Facilities	240L	240L	
<b>Total weekly Kerbside Collection Services</b>			<b>152,585</b>

## Waste Collection Area

In accordance with the *Local Government Act 2009*, the Council makes and levies utility charges for the provision of waste management services.

These charges are generally based on the application of the 'user pays' principle. Council regularly reviews the Defined Waste Collection Area and makes changes where required.



## What is in the Kerbside Wheelie Bins?

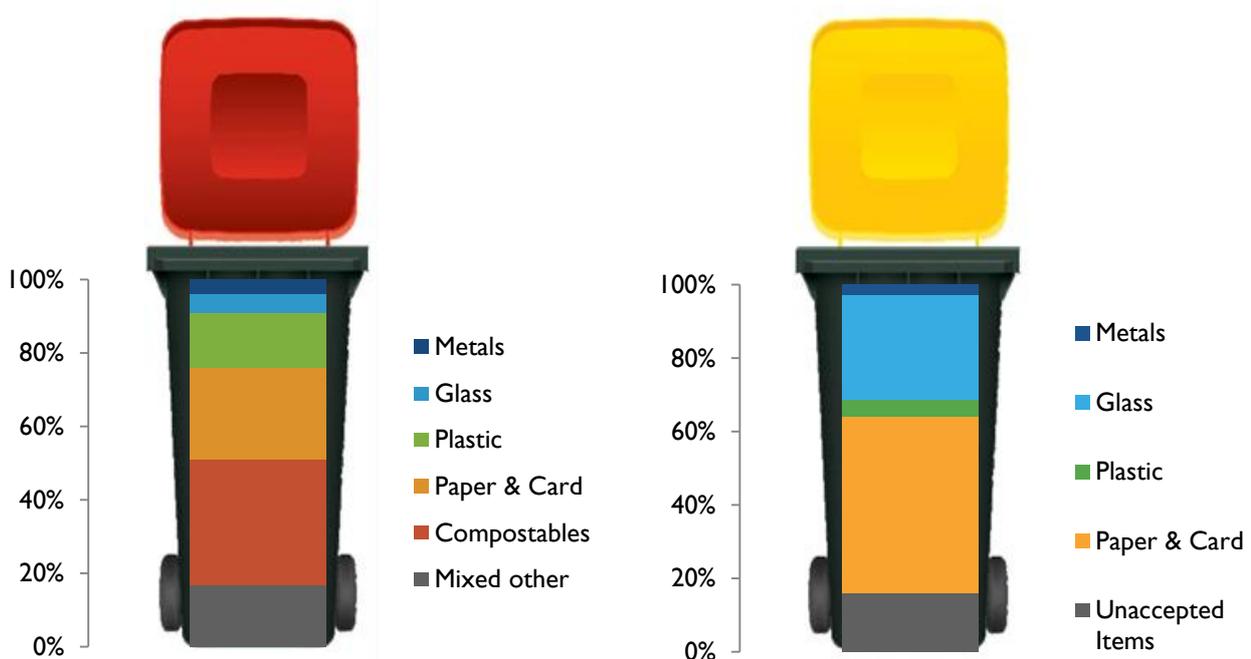
Residential waste is made up of non-recyclable general waste materials, recyclable materials and compostable waste such as green and food waste. Council residents have a red (or dark green) lidded 120 or 240 litre kerbside wheelie bin for the collection of general waste materials and a yellow lidded 240 litre kerbside wheelie bin for the collection of recyclable materials.

As depicted in Figure 5, even with the recycling rates being achieved by Council

residents, there is still a significant proportion of material that could be recycled or composted which ends up in the general waste bin.

Based on a recent survey of what material is presented to general waste bins, there is approximately 31,000 tonnes of recyclable material that could be separated at the kerbside.

**Figure 5: Composition of Kerbside General Waste and Recycling Bins**



## Recycling and Recovery Performance

Council is currently recycling 46% of the total waste stream.

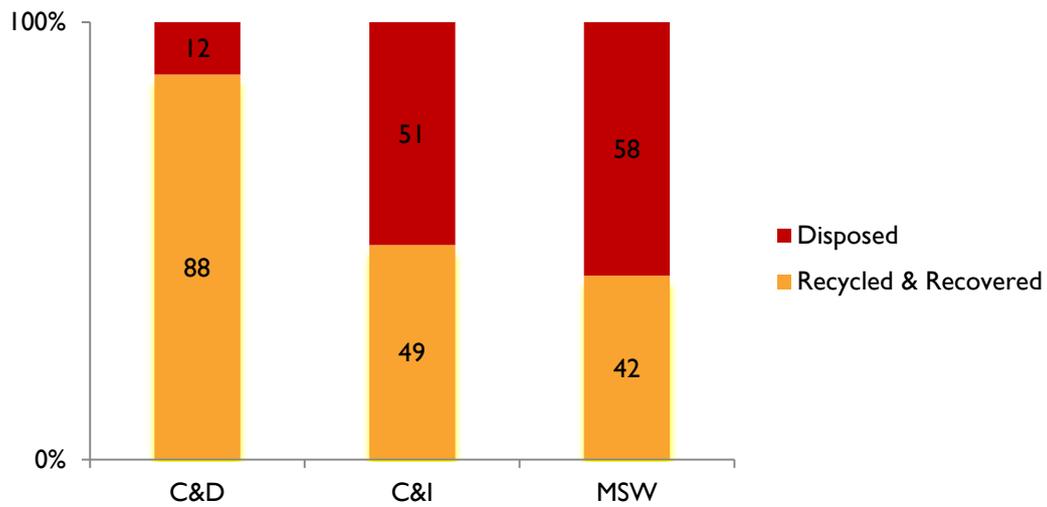
Even with this good recycling performance, 175,500 tonnes of waste was sent to landfill for disposal in 2014/15.

To meet the targets set out in this plan, and the targets within the Queensland Waste

Avoidance and Resource Productivity Strategy (2014-2024), recovery rates need to increase further.

Figure 6 outlines recycling performance between Construction & Demolition Waste (C&D), Commercial & Industrial Waste (C&I) & Municipal Solid Waste (MSW).

**Figure 6: Summary of Recycling and Recovery Performance**



Materials recovered at Waste Facilities

### Bulk Industrial Bin Services to Nominated Locations

At June 2015, 688 bulk industrial bins were supplied to 215 nominated locations in the region for the collection of general waste, comingled recycling, and paper and cardboard.

The nominated locations include residential multiple dwellings, community facilities,

Council facilities, waste management facilities and Council and community events.

The average weekly services for bulk industrial bins as at 30 June 2015 are listed in Table 5.

**Table 5: Average weekly services for bulk industrial bins (as at 30 June 2015)**

Nominated Locations	Bulk Bin Sizes	Total weekly Services as at 30 June 2015	
		General Waste	Comingled Recyclable Waste and Paper & Cardboard
Multiple Residential Dwellings	660L, 1100L plastic moulded bins; 1m <sup>3</sup> , 2m <sup>3</sup> , 3m <sup>3</sup> , 3.5m <sup>3</sup> & 4m <sup>3</sup> steel bins	2,130	685
Community and Council Facilities	660L, 1100L plastic moulded bins; 1m <sup>3</sup> , 2m <sup>3</sup> , 3m <sup>3</sup> , 3.5m <sup>3</sup> & 4m <sup>3</sup> steel bins	636	116
Temporary and Extra Services	660L, 1100L plastic moulded bins; 1m <sup>3</sup> , 2m <sup>3</sup> , 3m <sup>3</sup> , 3.5m <sup>3</sup> & 4m <sup>3</sup> steel bins	52	21

### Bulk Kerbside Clean-up Service

Council does not provide a Bulk Kerbside Clean-up service for the following reasons:

1. The piles of waste on the kerbside detract from the amenity of the area;
2. Free domestic tipping has been introduced across the region;
3. There is a significant cost to provide the service across the region;
4. Other residents scavenge through the materials on the footpath and may leave the area unsafe;
5. Reduces recycling as useable items are crushed when collected in the compactor truck;
6. Council's liability could be increased by encouraging residents to stack materials, which can be heavy or sharp, on the footpath;
7. There is a considerable safety risk from loose items being stacked on footpath should a storm event occur.

### c) Waste Minimisation and Education Program

Council is committed to the reduction of waste being disposed of to landfill and the recovery of resources through various projects and promotions across the region.

As part of this commitment, a waste minimisation and education program which focuses on raising awareness, understanding and knowledge via community, business and school participation is in place.

The education program encourages waste avoidance and waste minimisation as well as promoting recycling and resource recovery at business, home and through the waste facilities.

Waste minimisation education programs undertaken in 2014-2015 are listed in Table 6.



Waste Education and Minimisation Van display stand at Council events

**Table 6: Waste Minimisation Education Programs undertaken in 2014-2015**

<b>Program</b>	<b>Benefactor</b>	<b>Number of presentations or sites for 2015</b>
1. Resource-Ed School Program(Waste education)	Schools and Early Learning Centres	139
2. Waste Facility Tours - Trash to Treasure	Community, Schools and Early Learning Centres	5
3. Treasure Market Recycling Workshops	Community	12
4. Group Presentations/ Displays at events & community days	Community	13
5. Composting & Worm Farm Courses	Community	5
6. Annual Clean Up Australia Day Sites	Community, Schools and Businesses	117
7. Donations of worm farms and compost bins		
8. Annual Regional Recycler competition		
9. Development of calendars, recycling guides, fact sheets and brochures		
10. Maintaining up to date information on Council's website		

Council's website provides information regarding Council's waste services and operations.

Community education and engagement is critical in influencing the use of resources recovery centres, landfills and minimising unwanted items in kerbside recycling or losing reusable and recoverable items in general waste collections.

Consequently the communication will focus on developing and implementing a range of specific waste prevention programs that could be topic specific and support the activity within this WRRP. Examples of future programs to be investigated and implemented include targeting food waste, smart shopping, junk mail, disposable packaging and material specific re-use and repair initiatives.

#### d) Servicing of Public Place Bins, Butt Out Bins and Dog Bag Dispensers

Public place bins, butt out bins and dog bag dispensers are provided throughout the region to assist in the reduction of litter and to protect the natural environment and visual amenity of the area. Council also places recycling bins in high profile public locations

around the region to minimise waste going to landfill.

Table 7 lists the number of public place bins and services per week.

**Table 7: Public place bins supplied and serviced in the region**

<b>Bin Type and Services</b>	<b>No. of Bins</b>	<b>No. of Services per Week</b>
<b>General Waste Bins</b>	2,855	6,565
<b>Recycling Bins</b>	128	128
<b>Butt Out Bins</b>	43	167
<b>Dog Bag Dispensers</b>	327	602

#### e) Waste Services for Council and Community Events

Council provides cleaning services and support to a number of community and Council run events to ensure the standard of the event is of a high quality. The services range from providing wheelie bins and waste collections for small community events, such as sporting and school fetes, through to supplying wheelie bins, bulk bins, litter clean

up and amenity cleaning to a wide range of the larger promoted events throughout the region including the Redcliffe Festival, Urban Music Festival and the Decades Festival.

Table 8 shows the waste services that were provided to events in the region during 2015.

**Table 8: Number of bins supplied and serviced at events in the region**

<b>Type of Event</b>	<b>No. of Events</b>	<b>Waste &amp; Recycling Bins</b>	<b>Waste &amp; Recycling Services</b>
<b>School</b>	40	724	882
<b>Community</b>	214	3,668	7,618
<b>Council</b>	34	1,366	1,530
<b>Total</b>	<b>288</b>	<b>5,758</b>	<b>10,030</b>

## f) Littering and Illegal Dumping

Council has initiated a number of programs to raise awareness, knowledge and understanding for the public and reduce the amount of littering and illegal dumping that occurs across the region, as described in Table 9.

Council regularly carries out litter patrols and the removal of illegal dumping and dead animals from public roadways and reserves in the region as described in Table 10.

**Table 9: Litter and Illegal Dumping Engagement Programs**

- Waste education in schools and early learning centres
- Information stands at community events
- Free tipping at waste facilities for residents
- Promotion of community clean-up events, i.e. Clean Up Australia Day, Clean Up the Rivers, etc
- Surveillance of illegal dumping hot spots using motion detection cameras and regular patrols.
- Information on Council's website
- Joint enforcement and clean-up program with the state government targeting illegal dumping in state forests

**Table 10: Number of litter, illegal dumping and dead animal requests for 2014-2015**

Type of Request Received	Total number of Requests Received
Clean-up Litter and Illegal Dumps	1,232
Dead Animal Removal	73



*Clean Up Australia Day Volunteers*