



## Assets & Services Management Plan

### Waste Management 2016/2017



## Waste - Landfill Assets and Services Management Plan

### Introduction and Overview

This asset management plan, (hereinafter referred to as ‘the plan’) is intended to demonstrate responsible management of assets and services pertaining to waste management services, compliance with regulatory requirements and funding required to manage each asset.

The asset management plan is a standalone document; however, it is intrinsically linked with the following plans:

- Corporate Plan 2015 – 2020
- Stubble Street Landfill Site-Based Management and Site Development Plan
- Greenvale Landfill Site-Based Management and Site Development Plan
- Ravenswood Landfill Site-Based Management and Site Development Plan
- Pentland Landfill Site-Based Management and Site Development Plan
- NQ Regional Waste Reduction & Recycling Plan 2014-2024

Many aspects of waste management are service-centric; therefore the ‘levels of service’ framework will be a key indicator for future direction.

The plan encompasses assets located upon land described hereunder:

Asset Category	Asset Location	UTM Co-ordinates	Area (Site)	Approximate Closure	Replacement Value (\$M)
Stubble Street Landfill & Resource Recovery Facility	L31 SP144896	55K 420990.89mE 7782159.03mS	17.88 Ha	2033	\$4 million (calculated December 2014)
Greenvale Landfill	L21 SP185817	55K 284331.31mE 7898302.20mS	5.93 Ha	>2100	na
Pentland Landfill	L2 GF838294	55K 333114.24mE 7728807.88mS	14.7 Ha	>2100	na
Ravenswood Landfill	20 GS35	55K 488061.60mE 7774894.75mS	16.19 Ha	>2100	na

### Wheelie Bin Summary as at 30 June 2016

TYPE	Properties	Wheelie Bins
<i>Domestic Total</i>	4040	4300
<i>Commercial Total</i>	312	1136
<i>Public Bins</i>		350
<i>Street Bins (Gill &amp; Mosman)</i>		27



Figure 1 - Stubley Street Landfill

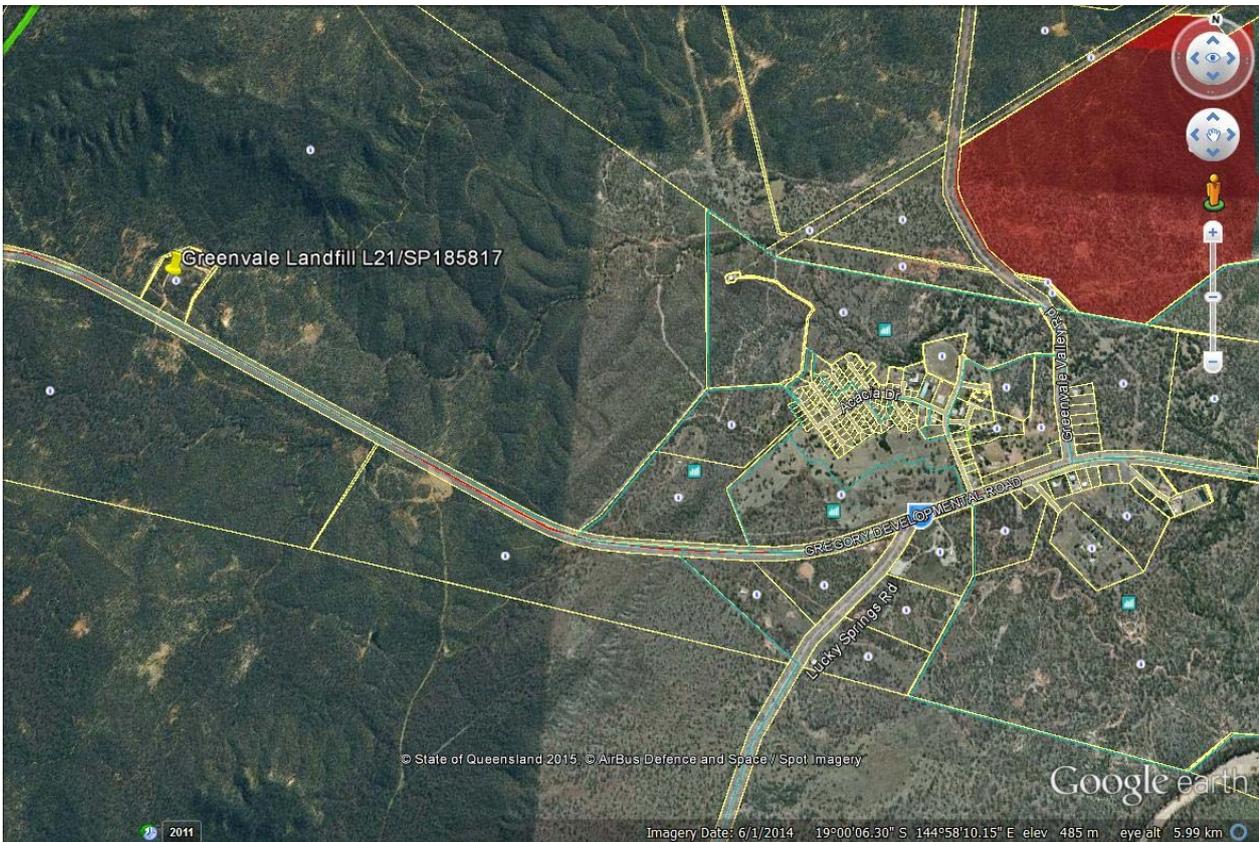


Figure 2 - Greenvale Landfill



Figure 3 - Pentland Landfill

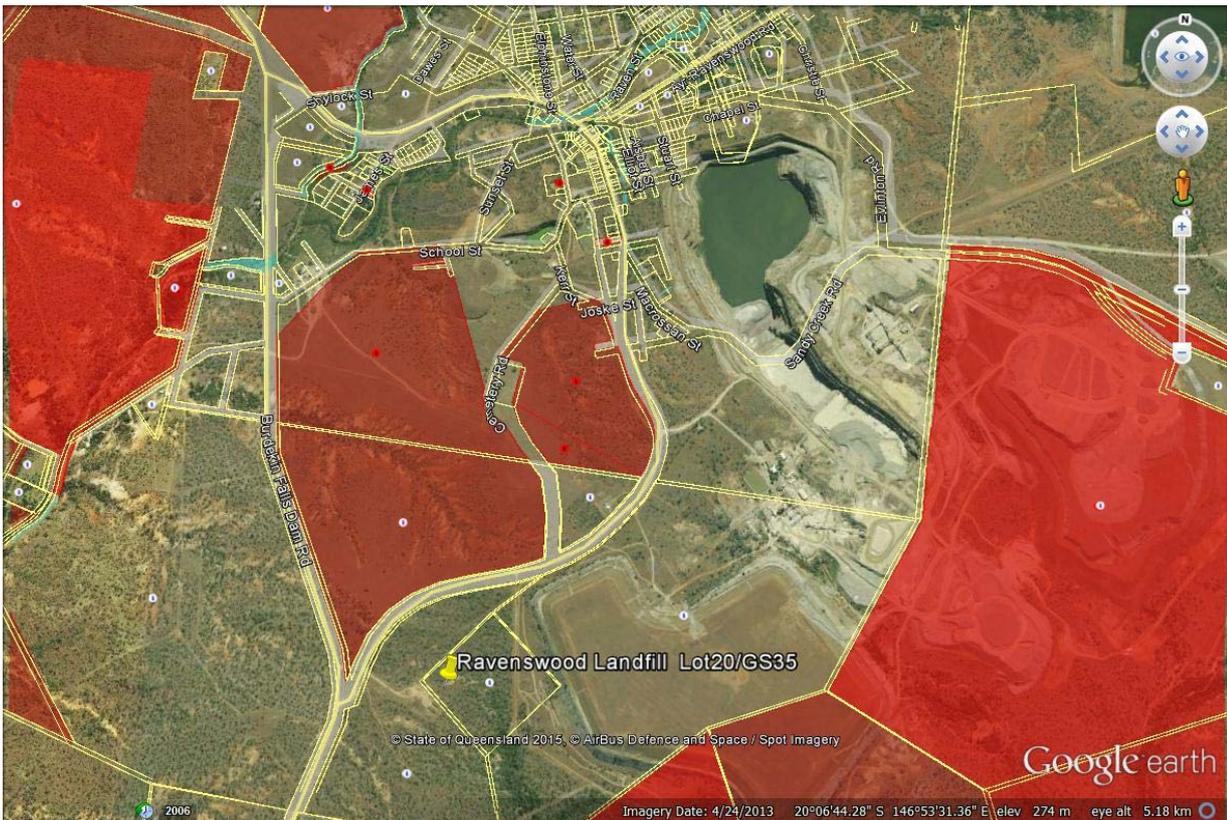


Figure 4 - Ravenswood Landfill

Licensing Details (Department of Environment and Heritage Protection)

LANDFILL	Development Approval	Permit Number	Threshold
Stubley Street Landfill & Resource Recovery Facility	IPDE01305708 (formerly NRO151)	EPPR00197313	10,000 to 20,000 t
Greenvale Landfill	NRO253DA	EPPR00334213	50 - 2,000 t
Pentland Landfill	NRO253DA	EPPR00334213	50 - 2,000 t
Ravenswood Landfill	NRO253DA	EPPR00334213	50 - 2,000 t

The management regime for Waste Management assets are outlined in the table below.

Council's Waste - Landfill Asset Plan

Asset Class	Asset Group	Component
Waste Management	Landfills	Stubley Street Landfill
		Weighbridge
		Weighbridge Hut
		Traxcavator Shed with Toilet & Hand Wash Basins
		New Machinery Shed & Office (under construction)
		Oil shed
		Landfill Compound Fence
		Cardboard Bailer
		Dangerous Goods Container
		Greenvale Landfill
		Ravenswood Landfill
		Pentland Landfill

General Asset Information

Asset	Component		Remaining Useful Life (2016-17)
Stubley Street Landfill	Land (life of landfill)	(currently a Council Reserve)	~18 years
	Weighbridge		30 years
	Weighbridge Hut		50 years
	Traxcavator Shed		1 year
	Replacement Shed & new on-site Office	(under construction)	50 years
	Oil Shed		30 years
	Compound Fences		50 years
	Wash Bay		~ 15 years
	Bore water Monitoring Holes	(must be decommissioned when no longer used)	~25 years
	Gas Monitoring Wells	(Under construction & must be decommissioned when no longer in use)	~25 years
	Cardboard Bailer		15 years
	Dangerous Goods Container		50 years
Greenvale Landfill	Land (life of landfill)		>100 years
	Shade Shelter		50 years

Pentland Landfill	Land (life of landfill)	(currently a Council Reserve)	>100 years
Ravenswood Landfill	Land (life of landfill)	(currently a Council Reserve)	>100 years

## Service Levels

The current 'levels of service' outlined in the plan cover four (4) service standards, including Landfill Disposal, Kerbside collection, Bulk rubbish Collection and Landfill Diversion.

### Landfill Disposal

Council operates four (4) licensed landfills. The landfills are located in Charters Towers, Greenvale, Pentland and Ravenswood. The primary landfill is located in Charters Towers and is licensed to accept up to 20,000 tonnes of waste per annum. The current levels of service for each landfill including hours of operation, landfill fees, waste types accepted etc., are identified in the individual site-based management plans for each of the nominated landfills are the opening hours are summarized below:

Hours of Operation	Stubley Street Landfill & Resource Recovery Area	Greenvale Landfill	Pentland Landfill	Ravenswood Landfill
<b>Monday</b>	8:00am to 5:00pm	Closed	Closed	Closed
<b>Tuesday</b>	8:00am to 5:00pm	8:00am to 12:00	Closed	Closed
<b>Wednesday</b>	8:00am to 5:00pm	Closed	8:00am to 6:00pm	8:00am to 12:00pm
<b>Thursday</b>	8:00am to 5:00pm	Closed	Closed	Closed
<b>Friday</b>	8:00am to 5:00pm	Closed	Closed	Closed
<b>Saturday</b>	8:00am to 5:00pm	8:00am to 12:00pm	8:00am to 6:00pm	8:00am to 12:00pm
<b>Sunday</b>	8:00am to 12 midday	Closed	Closed	Closed
<b>Public Holiday</b>	8:00am to 12 midday	As a normal Day	As a normal Day	As a normal Day
<b>Exceptions</b>	Closed Good Friday and Christmas Day in all circumstances.			

### Kerbside Collection

Council provides a weekly kerbside collection service for domestic and commercial waste. The area serviced is restricted to 'defined collection areas' across the region and are resolved by Council resolution annually. Maps of the defined collection areas can be accessed by referring to the **Annual Budget Report presented to Council**. The kerbside collection for Commercial businesses is not set to a rigid weekly collection with some businesses receiving two (2) or three (3) collections a week.

### Bulk Rubbish Collection

Council provides an annual hard waste or bulk-rubbish collection service for Charters Towers, Greenvale, Hervey Range, Sellheim, Mingela, Ravenswood, Balfes Creek, Homestead and Pentland. The service includes the collection of hard wastes, such as domestic household wastes and various yard items. The service may be extended under an Emergency Services Declaration to include materials like Green Waste etc.

### Landfill diversion

Council provides a variety of waste diversion initiatives. Initiatives include:

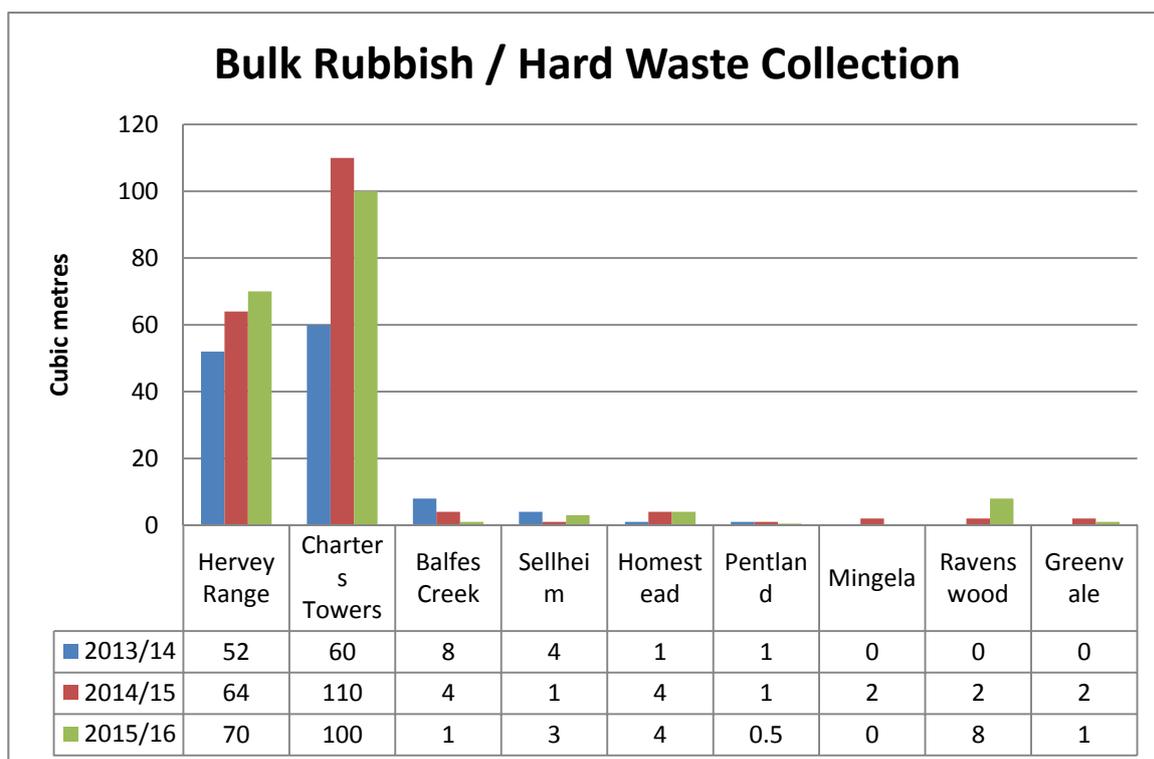
- Member of the Drum Muster program to recycle waste containers for agricultural & vet chemicals.
- Member of Chem Collect program to recycle used waste chemicals bi-annually.
- Provision of 5,000 L Oil Storage tanks at each landfill (or township depot) for collection and recycling of waste oils.
- Green waste mulching for sale and incorporation as a daily landfill cover.
- Battery Storage for collection and recycling of waste batteries.
- Provision of a Bailer at the Stublely Street landfill to bail commodities such as paper, cardboard, aluminium tins and plastics.
- Drop-off centres at our landfills for scrap steel, cardboard, aluminium and plastics.
- Salvage Rights contract to divert potential waste from the landfill for resale as a useful commodity.

### Service Level Trends / Evaluation

#### Bulk Rubbish (Hard Waste Collection) Data

The following table is a summary of Council’s Bulk Rubbish or Hard Collection conducted annually each October for the last three (3) years. Each cubic metre value presented is converted from vehicle capacity. Although it is not an exact science, there was a noticeable increase between 2013/14 and the following two (2) years.

Location	2013/14 (cubic metres)	2014/15 (cubic metres)	2015/16 (cubic metres)
Hervey Range	52	64	70
Charters Towers	60	110	100
Balfes Creek	8	4	1
Sellheim	4	1	3
Homestead	1	4	4
Pentland	1	1	0.5
Mingela	-	2	-
Ravenswood	-	2	8
Greenvale	-	2	1
<b>TOTAL LOAD CAPACITY</b>	<b>126.0</b>	<b>190.0</b>	<b>187.5</b>



### Waste Tonnes Landfill Data

The following tables are a summary of each Waste Category disposed of - to each of the landfills highlighted in this report. The tonnages provided are weighed at the Stublely Street site and calculated from conversion rates for the three (3) smaller landfill sites.

#### 2013/14

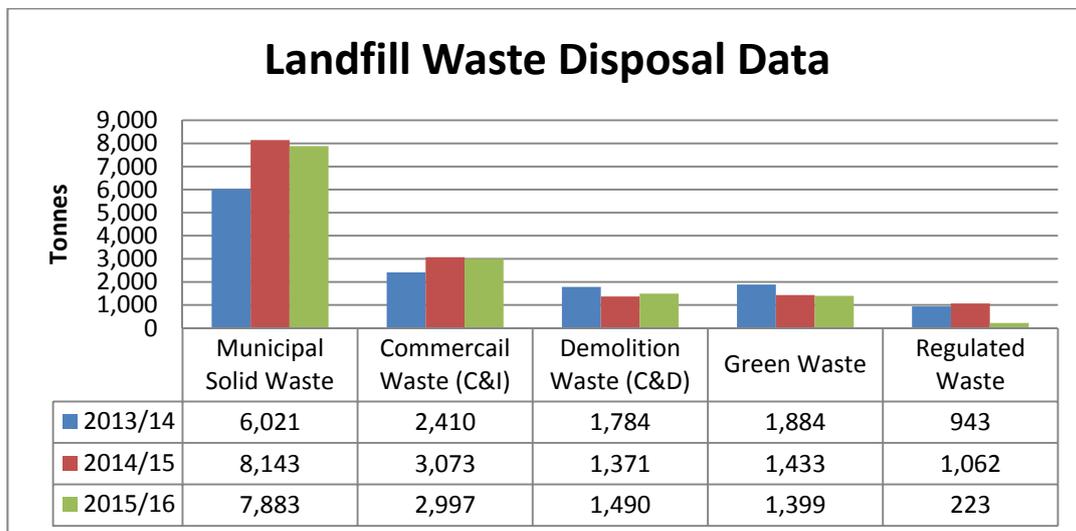
Landfill Site	Municipal Solid Waste (tonnes)	Commercial Waste (tonnes)	Demolition Waste (tonnes)	Green Waste (tonnes)	Regulated Waste (tonnes)	TOTALS
Stublely Street Landfill	5,628	2,323	1,781	1,857	941	12,532
Greenvale Landfill	148	35	3	7	2.0	195
Ravenswood Landfill	130	25	0	9	0	164
Pentland Landfill	115	27	0	11.00	0	153
<b>TOTALS</b>	<b>6,021</b>	<b>2,410</b>	<b>1,784</b>	<b>1,884</b>	<b>943</b>	<b>13,044</b>

#### 2014/15

Landfill Site	Municipal Solid Waste (tonnes)	Commercial Waste (tonnes)	Demolition Waste (tonnes)	Green Waste (tonnes)	Regulated Waste (tonnes)	TOTALS
Stublely Street Landfill	7,728	2,986	1,358	1,404	1,062	14,539
Greenvale Landfill	170	35	13	7	0	225
Ravenswood Landfill	130	25	0	10	0	165
Pentland Landfill	115	27	0	12	0	154
<b>TOTALS</b>	<b>8,143</b>	<b>3,073</b>	<b>1,371</b>	<b>1,433</b>	<b>1,062</b>	<b>15,083</b>

#### 2015/16

Landfill Site	Municipal Solid Waste (tonnes)	Commercial Waste (tonnes)	Demolition Waste (tonnes)	Green Waste (tonnes)	Regulated Waste (tonnes)	TOTALS
Stublely Street Landfill	7,363	2,931	1,480	1,370	223	13,367
Greenvale Landfill	230	25	7	9	0	271
Ravenswood Landfill	130	18	2	8	0	158
Pentland Landfill	160	23	1	12	0	196
<b>TOTALS</b>	<b>7,883</b>	<b>2,997</b>	<b>1,490</b>	<b>1,399</b>	<b>223</b>	<b>13,922</b>



### Recycling Data

As discussed, Council does not offer a kerbside recycling service. Recyclables are either collected directly by the waste contractor or some are extracted at the Stubley Street Landfill Site. The following data was provided by the Waste Contractor at the Stubley Street Landfill.

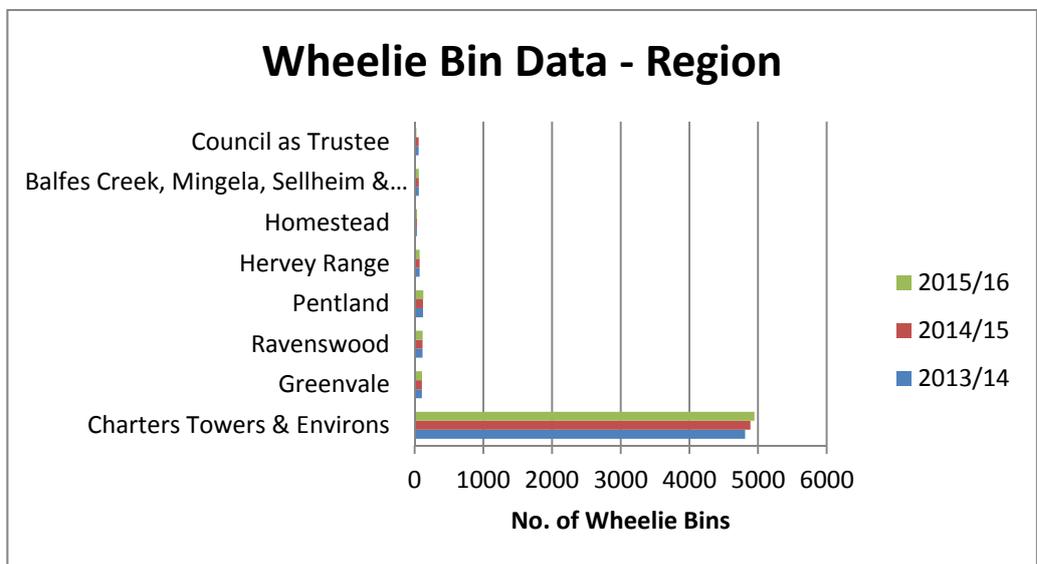
Recyclables (tonnes)	Tonnages Recycled		
	2013/14	2014/15	2015/16
Mixed Paper (excluding newsprint)	185	209	255
Aluminium / Aluminium Cans	3	8	3
Mixed Plastic	28	22	9
Steel ( including cans)	135	185	200
Stainless Steel		1	1
Green Waste	1,844	1,360	1,220
Batteries	18	5	6
<b>TOTALS</b>	<b>2,213</b>	<b>1,790</b>	<b>1,694</b>

Recyclables (Litres)	Litres Recycled		
	2013/14	2014/15	2015/16
Motor Oil	11,600	13,600	11,600

### Wheelie Bin Collection Data

Breakdown by Area:

Area	2013/14		2014/15		2015/16	
	No of Properties	Wheelie Bins	No. of Properties	Wheelie Bins	No. of Properties	Wheelie Bins
Charters Towers & Environs	3801	4811	3840	4888	3859	4948
Greenvale	105	105	105	105	106	106
Ravenswood	105	115	105	115	106	117
Pentland	112	121	112	121	115	126
Hervey Range	70	72	70	72	70	72
Homestead	33	33	33	33	34	34
Balfes Creek, Mingela, Sellheim & outer region	57	61	57	61	57	61
Council as Trustee	6	59	6	59	5	24
<b>TOTAL</b>	<b>4,289</b>	<b>5,377</b>	<b>4,328</b>	<b>5,454</b>	<b>4,352</b>	<b>5,488</b>

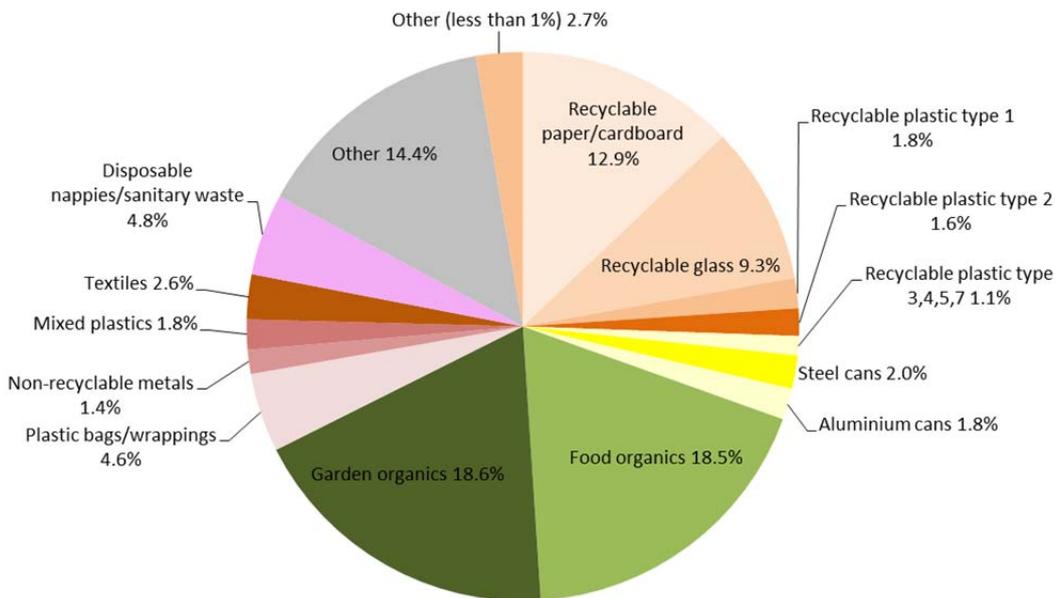


## Waste Audit Data

In June 2016, Council commissioned a **waste audit** of wheelie bin waste to accompany a Container Deposit audit organised by the state government. The key findings of the **waste audit** are outlined below.

- Households targeted for the audit were split evenly across three (3) suburbs; namely Charters Towers City, Richmond Hill and Queenton.
- The presentation rate for wheelie bins across the audit was **100%**.
- The average waste generated per household was **9.8 kg** of waste per week. This equates to approximately **2,824 tonnes** of waste per year, delivered by Council's garbage trucks. This compares favourably with weighbridge and vehicle data for 2014/15 measured at 2,910 tonnes.
- The top four (4) waste items by weight were garden organics (19%), food waste (18.5%), recyclable paper & cardboard (13%) and glass (9%).
- In the audit, 101 hazardous items were identified, including ten (10) sharps.
- 31%** of general waste could be diverted with a co-mingled recycling bin.
- 37%** of general waste could be diverted with a food/garden organic bin.
- With a three (3) bin system, it is estimated that **49%** of general waste could be diverted. This represents a maximum **total landfill diversion of 1,384 tonnes or 9.2% of the total waste disposed** to landfills in our region, based on the 15,083 tonnes received at council's landfills in the 2014/15 financial year.

The average bin fullness was 75% and the median 90%. 27% of bins were overflowing.



## Future Demand

### Stubley Street Landfill

- The number of visitors to the landfill in **2014/15** was **27,810** and the revenue raised through gate takings was **\$267,111**.
- The number of visitors to the landfill in **2015/16** was **24,460** and the revenue raised through gate takings was **\$215,220**.
- Total tonnes received (all landfills) for 2014/15 year was 15,083 tonnes, compared to 2015/16 at 13,9926
- The figures indicated above represent:
  - a decline of 12% in visitor numbers from 2014/15 to 2015/16;
  - A decline in income of 24% from 2014/15 to 2015/16; and
  - A decline in waste tonnages of 7.2% from 2014/15 to 2015/16.

- The variation between each year can be attributed to a single large external contract in 2014/15 and an economic downturn matched across most of Queensland.
- Based on NQ Regional Waste Production and Recycling Plan 2014-2024 (a joint initiative between Townsville City, Burdekin Shire, Hinchinbrook Shire and Charters Towers Regional Council) household numbers are projected to increase by 13% between 2014 and 2024. It is not believed that this will have a significant impact on future demand and volume received can be minimised by waste minimisation initiatives, recycling and re-use and price controls.

### Greenvale, Pentland and Ravenswood Landfills

- The three (3) landfills outlined above service 514 properties as at 30 June 2016, with approximately 18 visits to each site weekly.
- No gate fees apply to these landfills.
- It is not envisaged that demand will increase over the next 10 years. This of course assumes no increase in current industrial activities.

### Risk Management

Risks are to be considered in accordance with the Enterprise Risk Management Framework adopted and in use by Council. The following Risk Assessment Matrix is to be referenced when assigning a risk rating.

#### *Risk Assessment Matrix (Overall Risk Rating)*

ECM: T0342  Likelihood	Consequence				
	Insignificant No Injury 0-low \$ loss <b>1</b>	Minor First Aid Injury low-medium \$ loss <b>2</b>	Moderate Medical Treatment medium-high <b>3</b>	Major Serious Injuries Major \$ loss <b>4</b>	Catastrophic Death Huge \$ loss <b>5</b>
<b>Almost Certain</b> Is expected to occur at most times.	M	H	H	E	E
<b>Likely</b> Will probably occur at most times.	M	M	H	H	E
<b>Possible</b> Might occur at some time.	L	M	H	H	H
<b>Unlikely</b> Could occur at some time.	L	L	M	M	H
<b>Rare</b> May occur in rare circumstances.	L	L	M	M	H
<b>Codes:</b>	<b>E</b> xtreme Risk	<b>H</b> igh Risk	<b>M</b> oderate Risk	<b>L</b> ow Risk	

#### Notes:

1. This matrix is consistent with AS/NZS ISO 31000:2009.
2. The asset risk matrix above is different to the risk matrices used for Council's WH&S and EMS system documents.
3. To assist in risk ranking, scores are also allocated for each level of risk.
4. The SafePlan2 matrix is utilised by the Workplace Health and Safety section when assessing their risks.

Asset at Risk	Incident	Cause	Likelihood	Consequence	Risk Rating	Risk Treatment
Landfills	Environmental Harm	Leachate Dam collapse - release of contaminates onto neighbouring land	Possible	Moderate	H15	Development of Leachate Management Plan. Capital Works, monitoring of contaminants and post rain-event inspections
Landfills	Measured Landfill Gas Release	Gradual Build-up	Rare	Major	M12	Install Gas Wells, undertake surface sweeps with monitors and monitor closed in buildings
Landfills	Illegal Dumping of toxic Material	Illegal Activity	Rare	Major	M12	Good Contract Management
Landfills	Major Underground Fire	Arson	Possible	Major	H18	Cover all waste, minimise cell size and maintain regular fire breaks
Landfills	Incident – leading to personal injuries and/or damage to equipment	Interaction between general public and/or contractor staff and/or Council staff	Possible	Major	H18	Minimise interaction time and prevent where possible. Regular safety inspections
Landfills	Legal action	Numerous Complaints	Possible	Moderate (mostly perception) due to insurance cover	H15	Act promptly and seek resolutions to every complaint made
Landfill	Over Regulation	Red/Green Tape overload	Possible	Moderate	H15	Good Budget analysis
Landfill	Premature Closure	Unknown	Unlikely	Major	M13	Contingency Planning – identifying new landfill site

## Asset Management Practices

### Current Contracts

Contract	Current Contractor	Term of Contract	Current Expiry Date
Stubley Street Landfill - Supervision and Salvage	Charters Towers Produce	4 years with possible 2 year extension	30 June 2020 or 2022 with extension
Stubley Street Landfill - Mulching Contact		2 years	Not filled
Stubley Street Landfill - Weighbridge Software Contract	Mandalay Technology	3 years	30 November 2017
Pentland Landfill - Supervision Contract	Pentland Town Rural Fire Brigade	2 years	30 September 2017
Greenvale Landfill - Salvage Contract	Greenvale Progress Association	3 years	30 June 2017
Hervey Range - Domestic Kerbside Collection	Awaiting Council Resolution	5 years with possible 2 year extension	30 August 2021 or 2023 with extension

### Stubley Street Landfill

- Bi-annual Water Monitoring in accordance with environmental authority ENRE00863008
- Quarterly Landfill Gas monitoring
- Green waste mulching
- Pre-wet season preparation for storm water run-off
- Ongoing Maintenance of Fire Breaks and Fire break separations
- Annual weighbridge Calibration - Accurate Systems
- Maintenance of areas for recycling, including oil and waste battery collection systems
- Litter Collection Programs
- Landfill Audits and Site Inductions
- Progressive capping
- State Government Compliance

### Regional Landfills

- Annual Water Monitoring in accordance with environmental authority ENRE00862008
- Pre-wet season preparation for storm water run-off
- Ongoing Maintenance of Fire Breaks
- Green waste mulching
- Construction of new landfill trenches every three (3) years
- Rehabilitation of old trenches every three (3) years
- State Government Compliance

## Operations and Maintenance Plan

Compliance with:

- Stubble Street Landfill Site Based Management Plan
- Greenvale Landfill Site Based Management Plan
- Ravenswood Landfill Site Based Management Plan
- Pentland Landfill Site Based Management Plan
- State Government Licensing Conditions

Manage Contracts relating to waste within the terms of each contract.

Ensure key performance indicators are achieved for WH&S, Environment and Quality Control, including the training and supervision of relevant staff.

Ensure work plans met and internal policy and administrative directives followed.

## Renewal and Replacement Plan

With no assets set to expire in the next 15 years, no renewals or replacements are envisaged.

Council recently endorsed a Site Development Plan for the Stubble Street Landfill. This plan clearly defines the future development of the site for the next 16 years.

In the next ten (10) years, Council will be required to undertake some intermediate final cover design work and construct armoured drainage that will protect the site for at least 30 years after the landfill is completed.

Each Contract will be renewed as required to meet the requirements of 'service' expectation.

On the first table in this report, it is noted that the replacement value of the Stubble Street Landfill could be as high as \$4 million. Therefore, it must be recognised that Council may wish, or may even be required to purchase land for an alternate landfill site within the next ten (10) years,

Project Description Brief	30/06/2017	30/06/2018	30/06/2019	30/06/2020	30/06/2021	30/06/2022	30/06/2023	30/06/2024	30/06/2025	30/06/2026
Greenvale Landfill - New Trench		\$ 15,000.00				\$ 18,000.00			\$ 21,000.00	
Greenvale Landfill - Rehab of completed trench		\$ 6,000.00				\$ 7,000.00			\$ 8,000.00	
Ravenswood Landfill - New Trench				\$ 12,000.00			\$ 14,000.00			\$ 16,000.00
Ravenswood Landfill - Rehab of completed trench				\$ 6,000.00			\$ 7,000.00			\$ 8,000.00
Pentland Landfill - New Trench			\$ 12,000.00			\$ 14,000.00			\$ 16,000.00	
Pentland Landfill - Rehab of existing trench			\$ 6,000.00			\$ 7,000.00			\$ 8,000.00	
Stubble Street Landfill										
- New Water Line	\$ 18,000.00									
- Fence to adjoining property	\$ 6,000.00									
- New Shed & Site Office	\$ 75,000.00									
- New landfill cell Lining (NE Quadrant)		\$ 60,000.00								
- Purchase New Landfill Site					\$ 600,000.00					
- Critical Assessment Work / New Landfill Site							\$ 150,000			
- Rock Armour / Drainage Work				\$ 30,000.00						
- New Access Road to new Landfill Cell			\$ 20,000.00					\$ 20,000.00		
<i>Capping &amp; intermediate cover of Landfill Cells</i>										
	\$ 99,000.00	\$ 81,000.00	\$ 38,000.00	\$ 48,000.00	\$ 600,000.00	\$ 46,000.00	\$ 171,000.00	\$ 20,000.00	\$ 53,000.00	\$ 24,000.00
										\$ 1,180,000.00

Financial Information

**SUMMARY**

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
<b><u>Waste Management Funding</u></b>										
<b>Waste Collection Rates</b>	1,006,599	1,039,314	1,073,091	1,107,967	1,143,976	1,181,155	1,219,542	1,259,178	1,300,101	1,342,354
<b>Landfill Mgmt Rates</b>	137,735	142,211	146,833	151,605	156,532	161,620	166,872	172,296	177,895	183,677
<b>Fees &amp; Charges</b>	176,000	179,520	183,110	186,773	190,508	194,318	198,205	202,169	206,212	210,336
<b><u>Total Waste Funding</u></b>	<b>1,320,334</b>	<b>1,361,045</b>	<b>1,403,035</b>	<b>1,446,345</b>	<b>1,491,016</b>	<b>1,537,093</b>	<b>1,584,619</b>	<b>1,633,642</b>	<b>1,684,208</b>	<b>1,736,367</b>

**Annual Combined Total (Recurrent & Capital) Expenditure**

<b>Recurrent</b>	1,173,668	1,196,167	1,215,368	1,234,915	1,258,639	1,278,938	1,299,604	1,324,622	1,327,340	1,352,768
<b>Capital</b>	99,000	81,000	38,000	48,000	600,000	46,000	171,000	20,000	53,000	24,000
<b><u>Total Expenditure</u></b>	<b>1,272,668</b>	<b>1,277,167</b>	<b>1,253,368</b>	<b>1,282,915</b>	<b>1,858,639</b>	<b>1,324,938</b>	<b>1,470,604</b>	<b>1,344,622</b>	<b>1,380,340</b>	<b>1,376,768</b>
<b>Program Financial Position</b>	47,666	83,878	149,667	163,429	- 367,623	212,154	114,015	289,020	303,868	359,600

1. Operational Expenses

Funding Source	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Grants										
Waste Mgmt Revenue	1,105,668	1,126,807	1,144,754	1,163,023	1,185,309	1,204,279	1,223,591	1,247,089	1,248,400	1,272,393
Other										
<b>Total</b>	<b>1,105,668</b>	<b>1,126,807</b>	<b>1,144,754</b>	<b>1,163,023</b>	<b>1,185,309</b>	<b>1,204,279</b>	<b>1,223,591</b>	<b>1,247,089</b>	<b>1,248,400</b>	<b>1,272,393</b>

Expenditure-Landfill	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17
Wages	205,035	209,136	211,227	213,339	217,606	219,782	221,980	226,420	224,200	228,684
Materials	239,208	243,992	248,871	253,849	258,926	264,104	269,386	274,774	274,774	280,270
Plant	239,208	243,992	248,871	253,849	258,926	264,104	269,386	274,774	274,774	280,270
Finance Costs										
Depreciation & Provision	48,718	48,718	48,718	48,718	48,718	48,718	48,718	48,718	48,718	48,718
<b>Total</b>	<b>732,168</b>	<b>745,837</b>	<b>757,688</b>	<b>769,755</b>	<b>784,176</b>	<b>796,709</b>	<b>809,471</b>	<b>824,686</b>	<b>822,466</b>	<b>837,941</b>

Expenditure Waste Collection	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17	2016/17
Wages	149,400	152,388	153,912	155,451	158,560	160,146	161,747	164,982	163,365	166,632
Materials	44,820	45,716	46,631	47,563	48,515	49,485	50,475	51,484	52,514	53,564
Plant	179,280	182,866	186,523	190,253	194,058	197,940	201,898	205,936	210,055	214,256
Finance Costs										
Depreciation	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>373,500</b>	<b>380,970</b>	<b>387,066</b>	<b>393,268</b>	<b>401,133</b>	<b>407,570</b>	<b>414,120</b>	<b>422,402</b>	<b>425,933</b>	<b>434,452</b>

## 2. Maintenance

Funding Source	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Grants										
Waste Mgmt Revenue	68,000	69,360	70,614	71,892	73,331	74,659	76,013	77,534	78,941	80,374
Other										
<b>Total</b>	<b>68,000</b>	<b>69,360</b>	<b>70,614</b>	<b>71,892</b>	<b>73,331</b>	<b>74,659</b>	<b>76,013</b>	<b>77,534</b>	<b>78,941</b>	<b>80,374</b>

Expenditure-Landfill	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Wages	13,000	13,260	13,393	13,527	13,797	13,935	14,074	14,356	14,499	14,644
Materials	42,250	43,095	43,957	44,836	45,733	46,647	47,580	48,532	49,503	50,493
Plant	9,750	9,945	10,144	10,347	10,554	10,765	10,980	11,200	11,424	11,652
<b>Total</b>	<b>65,000</b>	<b>66,300</b>	<b>67,493</b>	<b>68,709</b>	<b>70,084</b>	<b>71,347</b>	<b>72,635</b>	<b>74,088</b>	<b>75,426</b>	<b>76,789</b>

Expenditure Waste Collection	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Wages										
Materials	3,000	3,060	3,121	3,183	3,247	3,312	3,378	3,446	3,515	3,585
Plant										
<b>Total</b>	<b>3,000</b>	<b>3,060</b>	<b>3,121</b>	<b>3,183</b>	<b>3,247</b>	<b>3,312</b>	<b>3,378</b>	<b>3,446</b>	<b>3,515</b>	<b>3,585</b>

### 3. Capital

Funding Source	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
General Revenue	-	-	-	-	-	-	-	-	-	-
Grants	-	-	-	-	-	-	-	-	-	-
Waste Mgmt Revenue	99,000	81,000	38,000	48,000	600,000	46,000	171,000	20,000	53,000	24,000
Developer Contributions										
Other										
<b>Total</b>	<b>99,000</b>	<b>81,000</b>	<b>38,000</b>	<b>48,000</b>	<b>600,000</b>	<b>46,000</b>	<b>171,000</b>	<b>20,000</b>	<b>53,000</b>	<b>24,000</b>

Capital Item Type	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Renewal	99,000									
New		81,000	38,000	48,000	600,000	46,000	171,000	20,000	53,000	24,000
Upgrade										
<b>Total</b>	<b>99,000</b>	<b>81,000</b>	<b>38,000</b>	<b>48,000</b>	<b>600,000</b>	<b>46,000</b>	<b>171,000</b>	<b>20,000</b>	<b>53,000</b>	<b>24,000</b>

Bsheet Capital Expense	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Wages										
Materials	99,000	81,000	38,000	48,000	600,000	46,000	171,000	20,000	53,000	24,000
Plant										
<b>Total</b>	<b>99,000</b>	<b>81,000</b>	<b>38,000</b>	<b>48,000</b>	<b>600,000</b>	<b>46,000</b>	<b>171,000</b>	<b>20,000</b>	<b>53,000</b>	<b>24,000</b>

Capital Position	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
<b>Opening WDV Balance</b>	390,367	470,649	532,931	552,213	581,495	1,162,777	1,190,059	1,342,341	1,343,623	1,377,905
Additional Assets	99,000	81,000	38,000	48,000	600,000	46,000	171,000	20,000	53,000	24,000
Annual Depreciation	48,718	48,718	48,718	48,718	48,718	48,718	48,718	48,718	48,718	48,718
Disposals	-	-	-	-	-	-	-	-	-	-
Initial Landfill Rehab Recognition	540,000	510,000	480,000	450,000	420,000	390,000	360,000	330,000	300,000	270,000
Enter Adjustments ( - debit)	-	-	-	-	-	-	-	-	-	-
<b>End of Year WDV Balance</b>	<b>980,649</b>	<b>1,012,931</b>	<b>1,002,213</b>	<b>1,001,495</b>	<b>1,552,777</b>	<b>1,550,059</b>	<b>1,672,341</b>	<b>1,643,623</b>	<b>1,647,905</b>	<b>1,623,187</b>

Capital Position	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2025/25	2025/25
Replacement Value	1,091,426	1,172,426	1,210,426	1,258,426	1,858,426	1,904,426	2,075,426	2,095,426	2,148,426	2,172,426
Accumulated Depreciation <i>Enter as a negative</i>	- 110,777	- 159,495	- 208,213	- 256,931	- 305,649	- 354,367	- 403,085	- 451,803	- 500,521	- 549,239
Written Down Value	980,649	1,012,931	1,002,213	1,001,495	1,552,777	1,550,059	1,672,341	1,643,623	1,647,905	1,623,187
<b>% value remaining</b>	<b>90%</b>	<b>86%</b>	<b>83%</b>	<b>80%</b>	<b>84%</b>	<b>81%</b>	<b>81%</b>	<b>78%</b>	<b>77%</b>	<b>75%</b>

## Improvement Plan

Improvement Action	Responsible Officer	Date for completion	Status as at 01/08/2016
Embrace the theories of risk management by instigating preventative measures as against re-active measures.	Environmental Services Manager	Ongoing	Up to date
Investigate new methods and technologies as they arise	Environmental Services Manager	Ongoing	Consideration Given to an Organics recycling program
Commission and construct a recycling drop-off centre at the Stubley Street Landfill (Optional)	Environmental Services Manager	Optional	Not planned 2016/17
Commission and construct a recycling shop at the Stubley Street Landfill or elsewhere (Optional)	Environmental Services Manager	Optional	Not planned 2016/17
New Traxcavator Shed and Office for the Stubley Street landfill	Environmental Services Manager	1 December 2016	20% Complete
Upgrade a Recycling Drop-off area at the Stubley Street landfill	Environmental Services Manager	1 October 2016	0% Complete
Implement a base level waste education program	Environmental Services Manager	30 June 2017	10% Complete
Upgrade of Main water Line to Landfill	Environmental Services Manager	1 December 2016	10% Complete
Improve both Information and Directional Signage at the Stubley Street landfill		1 December 2016	30% Complete
Continually investigate the merits of Contract Options for the provision of all waste management tasks	Environmental Services Manager	Ongoing	



Asset Management Plan Template  
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