



WASTE REDUCTION AND RECYCLING PLAN

2015 - 2018

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Issued By: Banana Shire Council
PO Box 412
BILOELA QLD 4715
Ph: (07) 4992 9500
Fax: (07) 4992 3493
Email: enquiries@banana.qld.gov.au

Author/s: Greg Curtis
Jaz Curtis

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EXECUTIVE SUMMARY

The Queensland *Waste Reduction and Recycling Act 2011* required local governments to develop a Waste Reduction and Recycling Plan.

The aim of this Plan is to fulfil Council's obligations under the *Waste Reduction and Recycling Act 2011* through the implementation of efficient and effective waste management operations in the Banana Shire.

The objectives of this Plan are to:

- Detail current and proposed waste infrastructure.
- Detail current and projected population and waste flow.
- Identify waste reduction and recycling targets.
- Identify strategic actions for waste reduction and recycling.
- Detail management, monitoring and improvement methods.

Council has identified three (3) targets for improving waste reduction and recycling in the Shire, being:

Target 1 Develop and implement a Waste Monitoring System by 2015.

Target 2 Develop and implement an ongoing Waste Reduction and Recycling Public Education Strategy by 2016.

Target 3 Develop and implement Site Waste Management Plans by 2017.

Council has devised several strategic actions for meeting its proposed targets, involving investigations into current waste and recycling practices, together with identifying areas for improvement and innovation.

This Plan will undergo public consultation from 1 February 2015 – 1 March 2015, with Council offering for public comment on the Plan. Comments from the public will be analysed and incorporated into the Plan, as appropriate. It is anticipated that the final Plan will be considered for adoption at Council's June 2015 Council Meeting.

Once this Plan has been adopted, it will be current for three years, expiring in 2018. Council will undertake a review of the Plan in the months prior to its expiry.

1.0 INTRODUCTION

1.1 BACKGROUND

Under the *Waste Reduction and Recycling Act 2011*, each local government in Queensland is required to adopt a Waste Reduction and Recycling Plan.

1.2 AIMS AND OBJECTIVES

The aim of this Plan is to fulfil Council's obligations under the *Waste Reduction and Recycling Act 2011* through the implementation of efficient and effective waste management operations in the Banana Shire.

The objectives of this Plan are to:

- Detail current and proposed waste infrastructure.
- Detail current and projected population and waste flow.
- Identify waste reduction and recycling targets.
- Identify strategic actions for waste reduction and recycling.
- Detail management, monitoring and improvement methods.

2.0 REGULATORY FRAMEWORK

2.1 WASTE REDUCTION AND RECYCLING ACT 2011

The *Waste Reduction and Recycling Act 2011* establishes a new framework to modernise waste management and resource recovery practices in Queensland, promote waste avoidance and reduction and encourage resource recovery and efficiency.

The objects of the *Waste Reduction and Recycling Act 2011* are:

- To promote waste avoidance and reduction, and resource recovery and efficiency actions;
- To reduce the consumption of natural resources and minimise the disposal of waste by encouraging waste avoidance and the recovery, re-use and recycling of waste;
- To minimise the overall impact of waste generation and disposal;
- To ensure a shared responsibility between government, business and industry and the community in waste management and resource recovery; and
- To support and implement national frameworks, objectives and priorities for waste management and resource recovery.

The key provisions of the *Waste Reduction and Recycling Act 2011* include:

- A waste disposal levy on industry waste sent to landfill;
- A requirement for Queensland Government agencies and local governments to prepare waste management plans;
- Introduction of product stewardship arrangements for any waste products that are identified as a growing problem for landfill in the future; and
- Strengthened litter and illegal dumping offences, including public reporting of vehicle-related littering offences.

2.2 WASTE REDUCTION AND RECYCLING REGULATION 2011

The *Waste Reduction and Recycling Regulation 2011* sits under the *Waste Reduction and Recycling Act 2011* and provides details about the said Act.

The key provisions of the *Waste Reduction and Recycling Regulation 2011* include:

- Fees for applications under the *Waste Reduction and Recycling Act 2011*;
- Management of used packaging materials; and
- Details about who is required to plan and report about waste management.

2.3 ENVIRONMENTAL PROTECTION ACT 1994

The object of the *Environmental Protection Act 1994* is to protect Queensland's environment while allowing for development that improves the total quality of life.

Chapter 2 of the Act gives authority for the Minister to make environmental policies to enhance or protect Queensland's environment, including waste management.

2.4 ENVIRONMENTAL PROTECTION REGULATION 2008

The *Environmental Protection Regulation 2008* outlines the regulatory requirements for environmental activities, including waste management activities that are environmentally relevant.

2.5 ENVIRONMENTAL PROTECTION (WASTE MANAGEMENT) REGULATION 2000

The object of the *Environmental Protection (Waste Management) Regulation 2000* is to protect the environment by:

- Minimising the impact of waste on the environment including, in particular, the impact of waste so far as it directly affects human health; and
- Establishing an integrated framework for minimising and managing waste under the principles of ecologically sustainable development.

2.6 LOCAL GOVERNMENT ACT 2009

The purpose of the *Local Government Act 2009* is to provide for:

- The way in which a local government is constituted and the nature and extent of its responsibilities and powers; and
- A system of local government in Queensland that is accountable, effective, efficient and sustainable.

The Act principles are as follows:

- Transparent and effective processes, and decision-making in the public interest;
- Sustainable development and management of assets and infrastructure, and delivery of effective services;
- Democratic representation, social inclusion and meaningful community engagement;
- Good governance of, and by, local government; and
- Ethical and legal behaviour of councillors and local government employees.

Under the Act, local government is able to adopt utility charges for waste management, in order to provide waste management services, activities and facilities.

2.7 NATIONAL WASTE POLICY 2009

The *National Waste Policy* heralds a coherent, efficient and environmentally responsible approach to waste management in Australia. The Policy, agreed by all Australian environment ministers in November 2009, and endorsed by the Council of Australian Governments, sets Australia's waste management and resource recovery direction to 2020.

The aims of the National Waste Policy are to:

- Avoid the generation of waste, reduce the amount of waste (including hazardous waste) for disposal;
- Manage waste as a resource;
- Ensure that waste treatment, disposal, recovery and re-use is undertaken in a safe, scientific and environmentally sound manner; and
- Contribute to the reduction in greenhouse gas emissions, energy conservation and production, water efficiency and the productivity of the land.

The Policy sets directions in six key areas and identifies 16 priority strategies that would benefit from a national or coordinated approach. These strategies will provide focus to the work across individual jurisdictions, build on current directions and complement existing activity. They will also provide clarity and certainty for business and the community.

The six key areas are:

1. **Taking responsibility** - Shared responsibility for reducing the environmental, health and safety footprint of products and materials across the manufacture-supply-consumption chain and at end-of-life.
2. **Improving the market** - Efficient and effective Australian markets operate for waste and recovered resources, with local technology and innovation being sought after internationally.
3. **Pursuing sustainability** - Less waste and improved use of waste to achieve broader environmental, social and economic benefits.
4. **Reducing hazard and risk** - Reduction of potentially hazardous content of wastes with consistent, safe and accountable waste recovery, handling and disposal.
5. **Tailoring solutions** - Increased capacity in regional, remote and Indigenous communities to manage waste and recover and re-use resources.
6. **Providing the evidence** - Access by decision makers to meaningful, accurate and current national waste and resource recovery data and information to measure progress and educate and inform the behaviour and the choices of the community.

The Policy also complements other government action to deliver greenhouse gas emission reductions, reduce energy and water use, support jobs and invest in future long term economic growth. It provides the basis for collaboration between the jurisdictions to deliver effective and efficient approaches to national waste issues and ensure that waste management remains aligned with Australia's international obligations.

2.8 QUEENSLAND WASTE AVOIDANCE AND RESOURCE PRODUCTIVITY STRATEGY 2014-2024

The Queensland Government is working with the community and industry to develop the *Queensland Waste Avoidance and Resource Productivity Strategy 2014-2024*. This Strategy outlines the new vision and direction for

The strategy is underpinned by five guiding principles:

1. Protecting human health and the environment to secure our future prosperity.
2. Sharing responsibility for avoiding unnecessary consumption and improving resource management.
3. Recognising of the economic, environmental and social costs of waste generation and disposal.
4. Recognising of regional differences and opportunities.
5. Full lifecycle management of resources.

The Strategy is also informed by the waste and resource management hierarchy, which sets out an order of preference for options for managing waste— from avoiding, to re-using, recovering, treating and disposing of waste – as illustrated below.



Taken together, the principles and hierarchy help shape the objectives and priorities and in turn inform the development of plans for implementing the strategy.

The strategy has four objectives:

1. Driving cultural change: All stakeholders recognise their role in meeting the vision of the waste strategy, and are informed and empowered to participate in achieving its goals and objectives.
2. Avoidance and minimisation: Queensland will realise all opportunities (environmental, economic and social) from maximising sustainable consumption and production.
3. Reuse, recovery and recycling: Queensland will optimise economic benefits from reuse, recovery and recycling.
4. Management, treatment and disposal: Queensland will reduce the impact of waste on human health and the environment through improved waste management practices.

The Strategy identifies priority areas for action under each objective and sets targets for improving resource recovery and recycling rates and reducing landfill disposal. These targets take account of the different circumstances and opportunities in metropolitan and other parts of the state.

The Strategy will be implemented through action plans that may be developed at a sectoral or individual entity level and will complement the objectives and priorities of the Strategy. Specific or sectoral targets within the plans will help contribute towards achieving the state wide targets. Implementation of the strategy will be regularly monitored and reported on.

3.0 BANANA SHIRE COUNCIL WASTE MANAGEMENT FACILITIES

3.1 OVERVIEW

The Banana Shire Council contains eight (8) transfer stations and three (3) landfills.


Transfer Stations	Landfills
<ul style="list-style-type: none"> • Banana • Baralaba • Biloela • Jambin • Moura • Thangool • Theodore • Wowan 	<ul style="list-style-type: none"> • Biloela (Trap Gully) • Cracow • Taroom


Accepted types of waste at most Council's transfer stations are:

- Clean green waste
- Scrap metal
- General domestic waste
- Waste motor oil
- Recyclables
 - Glass
 - Aluminium
 - Paper
 - Cardboard
- Batteries
- DrumMuster drums

Following is a description of each facility in alphabetical order, indicating types of waste accepted at each transfer station.

3.2 TRANSFER STATIONS


BANANA TRANSFER STATION	
Facility Type	Transfer Station
Location	Barfield Road, Banana
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • No on-site supervision. • Council staff haul waste for disposal to Trap Gully Landfill, Biloela. • Recyclable materials are collected and transported to recycling centres by contractors. • Green waste is converted to mulch on-site by a contractor, available for collection by the public.
Opening Hours	24 hours per day, 7 days per week.
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard).
	


BARALABA TRANSFER STATION	
Facility Type	Transfer Station
Location	Ashfield Road, Baralaba
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • No on-site supervision. • Council staff haul waste for disposal to Trap Gully Landfill, Biloela. • Recyclable materials are collected and transported to recycling centres by contractors. • Green waste is converted to mulch on-site by a contractor, available for collection by the public.
Opening Hours	24 hours per day, 7 days per week.
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard).
	


BILOELA TRANSFER STATION	
Facility Type	Transfer Station
Location	Calvale Road, Biloela
Contact	Supervised by contractor – Biloela Recycling (2012 – 2017).
Operations	<ul style="list-style-type: none"> • On-site supervision by contractor. • General waste is collected, compacted and hauled to Trap Gully Landfill, Biloela. • Recyclable materials are collected, sorted and distributed to recycling centres around Australia. • Green waste is converted in mulch on-site, available for collection by the public. • The 'Tip Shop' operates from the Transfer Station and sells salvaged items received by the Transfer Station. • The Transfer Station participates in the Drum Muster program, for recycling used drums. • A cardboard compactor is located on-site which is operated by the contractor. Cardboard is collected from around the Shire and transported to the Biloela Transfer Station, where the cardboard is compacted, baled and distributed to a recycling centre.
Opening Hours	6am – 6pm, September to May. 7am – 5pm, June to August. Closed Christmas Day & Easter Sunday.
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard), drums, batteries, whitegoods, paint cans.



JAMBIN TRANSFER STATION	
Facility Type	Transfer Station
Location	Jambin-Goovigen Road, Jambin
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • No on-site supervision. • Council staff haul waste for disposal to Trap Gully Landfill, Biloela. • Recyclable materials are collected and transported to recycling centres by contractors. • Green waste is converted to mulch on-site by a contractor, available for collection by the public.
Opening Hours	24 hours per day, 7 days per week.
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard).
	


MOURA TRANSFER STATION	
Facility Type	Transfer Station
Location	Dawson Highway, Moura
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • On-site supervision by Council staff. • General waste is collected, compacted and hauled to Trap Gully Landfill, Biloela. • Recyclable materials are collected, sorted and distributed to recycling centres around Australia. • Green waste is converted in mulch on-site, available for collection by the public. • The Transfer Station participates in the Drum Muster program, for recycling used drums.
Opening Hours	6am – 6pm, 7 days per week (closed Christmas Day).
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard), drums, whitegoods.
	

THANGOOL TRANSFER STATION	
Facility Type	Transfer Station
Location	Corner Burnett Highway & Cocks Millard Road, Thangool
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • No on-site supervision. • Council staff haul waste for disposal to Trap Gully Landfill, Biloela. • Recyclable materials are collected and transported to recycling centres by contractors. • Green waste is converted to mulch on-site by a contractor, available for collection by the public.
Opening Hours	24 hours per day, 7 days per week.
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard).
	

THEODORE TRANSFER STATION	
Facility Type	Transfer Station
Location	Goolaara-Heinekes Road, Theodore
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • Part time on-site supervision by Council staff. • Council staff haul waste for disposal to Trap Gully Landfill, Biloela. • Recyclable materials are collected and transported to recycling centres by contractors. • Green waste is converted to mulch on-site by a contractor, available for collection by the public. • The Transfer Station participates in the Drum Muster program, for recycling used drums.
Opening Hours	24 hours per day, 7 days per week.
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard), drums.
	

WOWAN TRANSFER STATION	
Facility Type	Transfer Station
Location	Dee River Road, Wowan
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • No on-site supervision. • Council staff haul waste for disposal to Trap Gully Landfill, Biloela. • Recyclable materials are collected and transported to recycling centres by contractors. • Green waste is converted to mulch on-site by a contractor, available for collection by the public.
Opening Hours	24 hours per day, 7 days per week.
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard).
	

3.3 LANDFILLS

TRAP GULLY, BILOELA	
Facility Type	Landfill
Location	Forestry Road, Biloela
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • On-site supervision by Council staff. • Large scale landfill operation for majority of Shire (excluding Taroom & Cracow areas). • General waste is delivered from transfer stations and kerbside collection, the compacted on-site for deposit into the landfill. • Recyclable materials are collected and transported to recycling centres by contractors.
Opening Hours	8am – 5pm, Monday to Friday (closed public holidays).
Wastes Handled	Commercial waste, grease trap waste, clean building rubble, asbestos, regulated waste, recyclable metals, deceased animals, tyres, general waste.
	

CRACOW	
Facility Type	Landfill
Location	Nathan Gorge Road, Cracow
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • No on-site supervision. • Landfill operation for the Cracow area. • General waste is delivered from the public is deposited into the landfill pit and covered by Council staff.
Opening Hours	24 hours per day, 7 days per week
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard).



TAROOM	
Facility Type	Landfill
Location	Leichhardt Highway, Taroom
Contact	Banana Shire Council - (07) 4992 9500
Operations	<ul style="list-style-type: none"> • No on-site supervision. • Landfill operation for the Taroom area. • General waste is delivered from the public is deposited into the landfill pit and covered by Council staff.
Opening Hours	24 hours per day, 7 days per week
Wastes Handled	Clean green waste, scrap metal, general domestic waste, waste motor oil, recyclables (glass, aluminium, paper, cardboard).



3.4 OTHER WASTE FACILITIES

DrumMuster Collection Centres

DrumMuster is for the collection of empty, clean, chemical containers around the Shire. Collection centres are as follows:

- Biloela Transfer Station - Banana Shire Council – (07) 4992 9500
No appointment required
- Moura Transfer Station - Banana Shire Council – (07) 4992 9500
No appointment required
- Taroom Works Depot - Banana Shire Council – (07) 4992 9500
By appointment only
- Theodore Aerodrome - Banana Shire Council – (07) 4992 9500
By appointment only
- Wowan Dixalea area – privately operated – 0408 199 247
By appointment only

Community Groups – Recycling Operations

Council has recognised that the recycling of glass by community groups within the Banana Shire minimises waste going to landfill, which in turn produces financial and environmental benefits to Council and the community, in addition to the wide-ranging benefit of preserving natural resources.

Current markets for glass recycling combined with high freight costs do not provide much financial incentive for community groups to continue to undertake recycling programs without further assistance.

For this purpose, Council provides financial assistance to approved community groups to carry out recycling operations. The community groups recycling operations are as follows:

- Callide Valley Lions Club
State Farm Road, Biloela
Ph: 0409 893 910
- Rotary Club of Moura
Moura Transfer Station, Dawson Highway, Moura
Ph: (07) 4997 1403
- Lions Club of Theodore Inc.
PO Box 276, Theodore
Ph: 1800 655 201

3.5 PROPOSED WASTE INFRASTRUCTURE

Stage 2 - Leachate Trench

Banana Shire Council will undertake Stage 2 of the leachate trench at Trap Gully Landfill, Biloela in the 2014/15 financial year. The project will include completing the construction of the trench, together with the construction of a dam wall to capture run-off from the site.

4.0 WASTE CHARACTERISTICS

4.1 CURRENT KERBSIDE COLLECTION SERVICES

Banana Shire Council offers kerbside collection services for general waste. *Table 4.1.1* details the number of kerbside collection services for each town (served weekly).

Banana Shire Council does not offer a kerbside recycling service. Council has investigated the possibility of kerbside recycling, to which research has found that it would not be financially feasible to introduce this recycling service at this time.

Residents are encouraged to recycle at their local transfer station or landfill site.

Table 4.1.1 Banana Shire - Kerbside Collection

TOWN	NUMBER OF SERVICES (WEEKLY)
Banana	70
Baralaba	148
Biloela	2,314
Cracow	0
Dululu	14
Goovigen	40
Jambin	17
Moura	904
Taroom	384
Thangool	117
Theodore	242
Wowan	82

4.2 TRANSFER STATION DISPOSAL

Banana Shire Council operates eight (8) transfer stations, as listed in *Table 4.2.1 Transfer Station Details*.

All transfer stations offer recycling options, with separated areas for:

- General waste;
- Glass;
- Cardboard and paper;
- Aluminium;
- Scrap metal;
- Oils; and
- Clean green waste.

The Biloela and Moura transfer stations are fully supervised during operating hours, and offer additional recycling options for:

- DrumMuster drums;
- Whitegoods;
- Vehicle batteries; and
- Building waste;

Waste that is not accepted at Council's transfer stations includes commercial waste, industrial waste, hazardous/dangerous waste and tyres. These waste items must be disposed of at Trap Gully Landfill, Biloela at the cost of the customer.

Table 4.2.1 Transfer Station Figures lists the tonnage of general waste collected at the transfer station and transferred to the Trap Gully Landfill.

In the 2012/13 and 2013/14 financial years, the Banana Shire experienced a surge in population and industrial activity, due to the construction of gas pipelines throughout the Shire. This surge resulted in a distinctive increase in the amount of waste generated for that period. It is expected that the amount of waste will significantly decrease in the current financial year.

Table 4.2.1 Transfer Station Figures

TRANSFER STATION	TONNES PER YEAR		
	2011/12	2012/13	2013/14
Banana	No Record Available	98.77	190.14
Baralaba	No Record Available	116.69	170.65
Biloela	832.26	1,869.14	1,222.83
Jambin	200.66	304.28	260.48
Moura	468.98	728.24	724.81
Thangool	278.14	491.32	465.62
Theodore	164.90	253.63	227.50
Wowan	8.50	162.16	172.08

4.3 LANDFILL DISPOSAL

Banana Shire Council has three (3) landfills located at Biloela, Cracow and Taroom.

All landfill sites offer recycling options, with separated areas for:

- General waste (landfill pit);
- Glass;
- Cardboard and paper;
- Aluminium;
- Scrap metal;
- Oils; and
- Clean green waste.

Table 4.3.1 Landfill Details lists the relevant details for each landfill site.

Table 4.3.2 Landfill Figures lists the tonnage of general waste deposited at Council's landfill sites each financial year.

Table 4.3.1 Landfill Details

LANDFILL	WASTE ACCEPTANCE CRITERIA	FUTURE LIFE
Trap Gully, Biloela	Commercial waste, grease trap waste, clean building rubble, asbestos, regulated waste, recyclable metals, deceased animals, tyres, general waste.	Based on the current rate of disposal, there is an estimated 40 years landfill capacity remaining.
Cracow	General domestic waste. Recyclable waste material	Council is currently investigating the development of a rehabilitation strategy to

	received on-site must be segregated from general waste and stored in the marked areas at the facility. Council arranges for the collection and removal of these items for recycling.	rehabilitate part of the landfill for future use.
Taroom	General domestic waste. Recyclable waste material received on-site must be segregated from general waste and stored in the marked areas at the facility. Council arranges for the collection and removal of these items for recycling.	Council is currently investigating the development of a rehabilitation strategy to rehabilitate part of the landfill for future use.

Table 4.3.2 Landfill Figures

LANDFILL	TONNES PER YEAR		
	2011/12	2012/13	2013/14
Biloela (Trap Gully)	9,881.54	17,305.26	19,094.28
Cracow*	411.60	413.70	415.80
Taroom*	1,833.30	1,845.90	1,860.60

*Estimated

4.4 POPULATION PROJECTIONS

As per information provided by the Queensland Treasury and Trade, the population projection figures for the Banana Shire Council can be found in *Table 4.4.1 Banana Shire Population Projection*.

Banana Shire can expect a steady increase in population over the twenty year period between 2011 – 2031, approximately 3.8% growth per five (5) years.

Table 4.4.1 Banana Shire Population Projection^(a)

YEAR				
2011	2016	2021	2026	2031
15,742	16,948	17,310	17,759	18,277

(a) Sourced from Queensland Treasury and Trade – Queensland Regional Profile.

With the steady population growth expected in the Banana Shire in the foreseeable future, a steady growth in residential development is also expected.

Please refer to *Appendix A – Broadhectare Study 2012* for residential development mapping for the Banana Shire.

Commercial industry in the Banana Shire is mainly comprised of agriculture and mining, and is expected to experience a gradual growth as per the expected population figures.

Major industrial sites in the Banana Shire are as follows:

- Baralaba Coal Mine, Baralaba (Cockatoo Coal)
- Callide Power Station, Biloela (CS Energy)
- Callide Coal Mine, Biloela (Anglo American)
- Dawson Coal Mine, Moura (Anglo American)
- Teys Brothers Meatworks, Biloela
- Queensland Nitrate Plant, Moura

It is expected that within the timeframe of this Plan, gas field expansion may commence in the southern end of the Shire around Taroom.

4.5 WASTE PROJECTIONS

Please refer to *Table 4.5.1 Trap Gully Landfill Waste Types*, for the amount of different waste types recorded at Trap Gully for financial years 2011/12 – 2013/14.

During 2012/13, Banana Shire experienced numerous flooding events, which significantly increased the amount of waste being disposed of at Trap Gully due to recovery efforts.

It is also worth noting that during the period 2012 – 2014, Banana Shire experienced an increase in waste due to various gas pipeline projects in the Shire. These projects have since been completed, and it is expected that landfill tonnage will decrease in coming years, as stated in *Table 4.5.2 Landfill Tonnage Projection*.

Table 4.5.1 Trap Gully Landfill Waste Types

TYPE	TONNES PER YEAR (Confirmed)		
	2011/12	2012/13	2013/14
Rock	-	1,285.67	2.72
Asbestos	126.30	45.16	47.28
BSC MSW	2,576.10	3,380.78	3,496.36
BSC other	28.08	0.14	1.58
BSC STP Biosolids	337.64	468.92	573.68
BSC WBT Comm/Dom	1,951.48	3,175.88	3,395.84
Clean Building Rubble	108.02	199.70	59.88
Clean Fill	951.99	131.16	673.04
Commercial Public	3,172.21	5,729.68	9,481.77
Flood Waste	-	326.52	3.84
Grease Trap	449.14	501.36	399.38
Incoming Recyclable	-	387.14	335.25
Outgoing Recyclable	17.26	82.24	411.91
Regulated – Low Hazard	161.80	250.65	148.36
Sand	-	1,339.20	63.39
UNITS PER YEAR (Confirmed)			
Dead Animals – Medium	-	2	0
Dead Animals – Small	-	8	147
Tyres	189	435	325

Table 4.5.2 Landfill Tonnage Projection

LANDFILL	TONNES PER YEAR			TONNES PER YEAR (Estimated)		
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Biloela ^(b)	9,881.54	17,305.26	19,094.28	15,000.00	15,101.85	15,218.88
Cracow ^(c)	411.60	413.70	415.80	422.10	424.20	226.30
Taroom ^(c)	1,833.30	1,845.90	1,860.60	1,875.30	1,887.90	1,902.60

(b) Calculated with average 2.49 tonne per person per year (2011 waste / 2011 census population), with estimated growth of 0.76% per year.

(c) Calculated with average 2.1 tonne per person per year (ABS), with estimated population growth of 0.76% per year.

5.0 WASTE REDUCTION TARGETS

Council has identified targets to achieve in order to reduce and amount of waste generated and to better improve recycling practices in the Shire.

The targets that have been identified are as follows:

Target 1	Develop and implement a Waste Monitoring System by 2015.
Target 2	Develop and implement an ongoing Waste Reduction and Recycling Public Education Strategy by 2016.
Target 3	Develop and implement Site Waste Management Plans by 2017.

Target 1 Develop and implement a Waste Monitoring System by 2015

Council has identified the need for an ongoing Waste Monitoring System to record the amount of waste being disposed of at landfills, as well as the amount of materials recycled from Council facilities. This will allow for more accurate record keeping and reporting.

Council will aim to develop and implement a Waste Monitoring System by December 2015.

Target 2 Develop and implement an ongoing Waste Reduction and Recycling Public Education Strategy by 2016

As Council is not in a position to offer kerbside recycling to its residents, public education and encouragement regarding recycling is imperative.

Council will aim to develop and implement an ongoing Waste Reduction and Recycling Public Education Strategy by December 2016.

This Strategy will use Council's resources, such as internet and customer service centres, to educate the public on the importance of waste reduction and the recycling facilities available to them in the Shire.

Target 3 Develop and implement Site Waste Management Plans by 2017

Council will aim to develop and implement a Site Waste Management Plan for each of its transfer stations and landfill sites by December 2017.

The Site Waste Management Plan will identify the waste treatment operations at the site, as well as measures put in place to reduce the amount of landfill generated, as per the waste & resource management hierarchy described in Part 2.8 of this Plan.

6.0 STRATEGIC ACTION PLAN

In order to achieve the Waste Reduction Targets listed in Part 5 of this Plan, the following strategic actions have been planned:

TARGET	STRATEGIC ACTIONS
<p>Target 1 - Develop and implement a Waste Monitoring System by 2015.</p>	<ul style="list-style-type: none"> • Investigate current monitoring and reporting systems. • Investigate components to be captured in proposed Waste Monitoring System. • Increase the ability for capturing and managing waste management data.
<p>Target 2 - Develop and implement an ongoing Waste Reduction and Recycling Public Education Scheme by 2016.</p>	<ul style="list-style-type: none"> • Identify public audience groups. • Identify Council resources for use in public education. • Develop a plan to build public knowledge for sustainable waste management behaviour.
<p>Target 3 - Develop and implement Site Waste Management Plans by 2017.</p>	<ul style="list-style-type: none"> • Investigate components to be captured in Site Waste Management Plans. • Identify current treatment procedures for different waste types. • Develop Site Waste Management Plans using the waste & resource management hierarchy.

7.0 CONSULTATION AND REVIEW

7.1 CONSULTATION

The draft Waste Reduction and Recycling Plan 2015 – 2018 will be released for public comment on Monday 2 February 2015.

The draft Plan will be available for viewing on Council's website, together with an online survey that can be completed by the public.

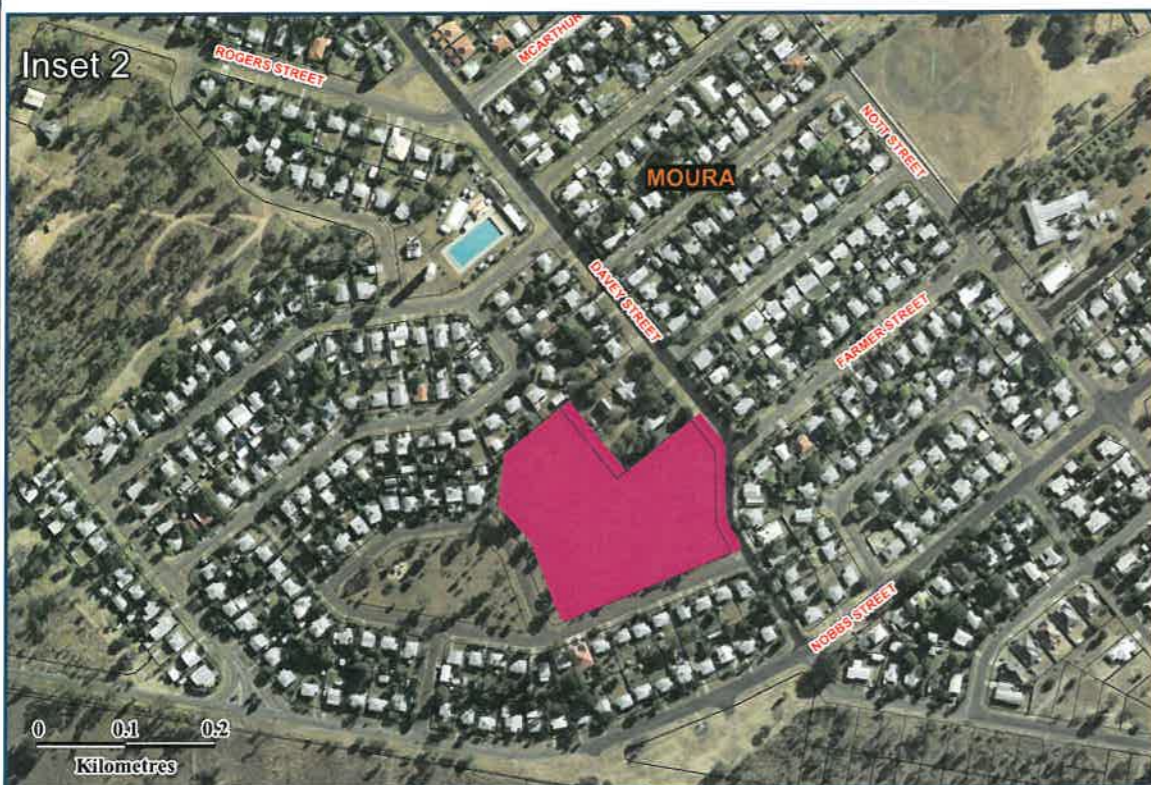
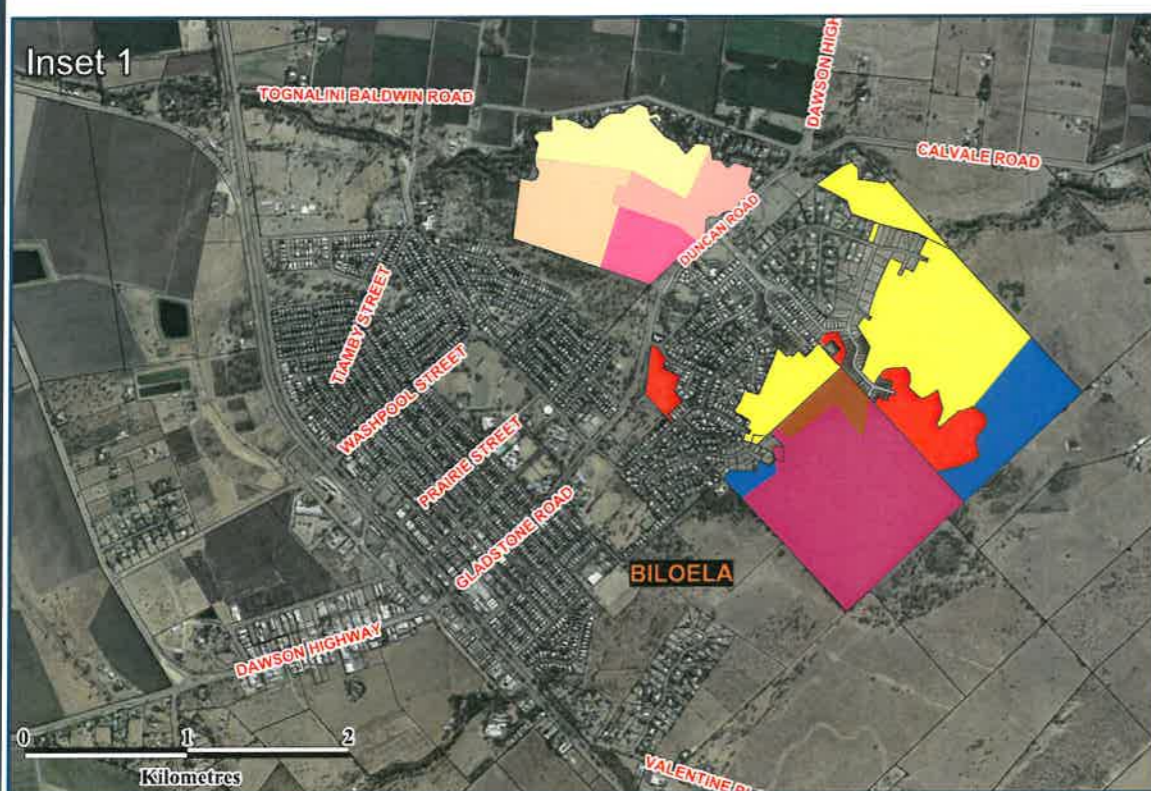
Community consultation will close on at 5.00pm on Monday 2 March 2015. Council will then collate and analyse the feedback and amend the draft Plan accordingly.

It is anticipated that the amended Plan will be tabled for adoption at Council's April 2015 Ordinary Council Meeting.

7.2 REVIEW

Legislation requires this Plan to be reviewed every three (3) years. Subsequently, the next major review of this Plan will commence in late 2017.

It is expected that the targets and strategic actions outlined in this Plan will remain valid until the next formal review is completed in 2018.



Legend

Broadhectare land Banana Shire Council

Timeframe	Urban residential	Low density residential
0 – 2 years	21 ha	16 ha
2 – 5 years	69 ha	20 ha
5 – 10 years	37 ha	0 ha
10+ years	9 ha	22 ha
Not specified	112 ha	20 ha

Land suitable and potentially available for residential development. Timeframes are indicative only.

Other map features

- Local government boundaries
- Major roads



Notes

This map indicates the areas which are suitable and potentially available for residential development. This map does not commit council to approve developments within these identified areas or within the indicated timeframes. This map forms part of the Broadhectare Study and should be read in conjunction with the main text of the profile.

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This edition of the Broadhectare Study was based on the Digital Cadastral Database, September 2012

