

WASTE REDUCTION AND RECYCLING PLAN 2015 - 2024

Boulia Shire Council



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This Waste Reduction and Recycling Plan is to be in effect for a minimum of three years from the date of issue, however this does not prevent the plan being amended, replaced or extended if required.

Introduction

Under state government legislation, local governments are required to prepare, adopt and implement a plan that addresses waste reduction and recycling. With the release of the *Waste Reduction and Recycling Act 2011* (WRR Act) in December 2011, the local government waste plans are required to meet the objectives of the WRR Act and make appropriate reference to the goals and targets of the State Waste Strategy.

The Boulia Shire Council Waste Reduction and Recycling Plan 2015-2024 provides an assessment of the existing waste management facilities and explores waste minimisation strategies and initiatives that can be considered and introduced over the life of the Plan.

It is noted however that due to Council's location from markets, most of the State Waste Strategy's priority wastes are unable to be collected, stored and transported. Stockpiling until there is sufficient quantity is not in most cases a viable option.

The main waste stream in Boulia Shire is from domestic premises in the townships. Rural residents generally dispose of their waste on their own properties. Industry is limited generally to Council depot and associated operations, as well as a hotel, restaurant and cafe.

Therefore, the Plan provides an emphasis on awareness of sustainable waste minimisation and resource recovery based on an environmentally, financially and socially responsible approach. The success of the Plan depends on all sectors of the community sharing the responsibility to embrace the principles and implement the actions.

Purpose and scope of this Plan

The purpose of this Plan is to ensure that appropriate procedures and programs of work are in place to:

- Identify sources of waste;
- Establish a framework for minimising waste generation;
- Detail control measures to mitigate the impacts associated with waste;
- Outline the disposal protocols for waste;
- Detail the review and reporting protocols.

The scope of this Plan is to identify current and future waste practices, and provide actions that will address the requirements of the WRR Act and the *Queensland Waste Avoidance and Resource Productivity Strategy (2014-2024)*. It will encourage residents and local government to reduce the overall amount of waste to landfill by identifying reuse and recycling opportunities and initiatives.

The plan covers a nine year period, and will be reviewed every three years.

Shire profile

Boulia Shire is situated in Western Queensland and encompasses an area of 61,000sq. kilometers with a population of 496¹. It is situated 300km from Mt Isa to the north and 370km from Winton to the east.

There are two towns in the Shire with the town of Boulia being the main administration area for the Boulia Shire Council. Urandangi is the other town in the north west of the Shire. Boulia town is situated on the banks of the Burke River named for the explorers Burke and Wills who travelled through this area on their ill-fated trip to the gulf.

Boulia is home to the mysterious Min Min Lights, an unexplained ball of light that can follow cars and people for miles and then wink out of existence.

The town of Boulia was gazetted on 2 August 1879 when an area of 1280 acres was set aside as a reserve for township purposes near the Boulia Waterhole on the Burke River. The Local Authority was gazetted on 1 July 1902.

Population profile

There are 480 people within the shire having an average age of 31. 45.7% of families have 2.3 children.

Population growth has remained relatively static over the last few census periods with an overall decline since the 2001 census. Although overall there was a population growth of 1.3% (2013-14) outside the Greater Brisbane area, western rural councils are generally in decline.

Consequently there is no forecast for future growth in waste generation, whether it be residential, commercial or industrial.

¹ ABS 2011

Legislative and policy framework

The Department of Environment and Heritage Protection is the key agency for regulating most waste management activities.

The Queensland *Environmental Protection Act 1994* (EP Act) and the *Waste Reduction and Recycling Act 2011* (WRR Act), which provide the framework for prioritising waste management practices to achieve the best environmental outcome.

The object of the EP Act is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.

In regards to waste management, the EP Act provides the following definition:

"Waste" includes any gas, liquid, solid or energy (or combination of wastes) that is surplus to, or unwanted from, any industrial, commercial, domestic or other activity, whether or not of value

The objectives of the WRR Act 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;
- to support and implement national frameworks, objectives and priorities for waste management and resource recovery.

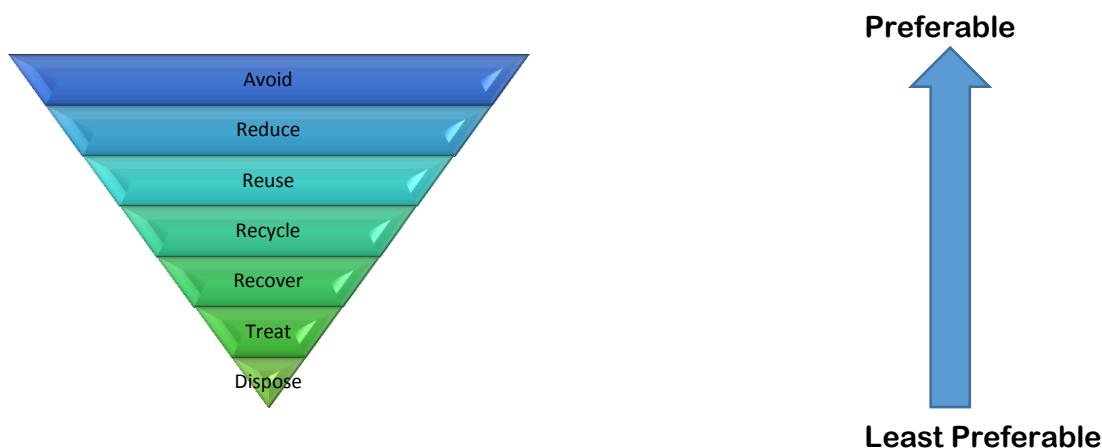
Both Acts aim at 'best practice environmental management' of an activity as assessed against national and international standards within the context in which the activity operates. This includes assessment against relevant industry standards.

In addition, changes to the *Public Health Act 2005* commencing on 1 September 2015 address issues associated with asbestos containing material (ACM). The local government is responsible for administering the Act with respect to domestic ACM up to 10m². Council has identified ACM as a hazardous product and has set aside a specific area at the landfill for its disposal.

Waste hierarchy

The waste and resource management hierarchy is a nationally and internationally accepted guide for prioritising waste management practices with the objective of achieving optimal environmental outcomes. It sets out the preferred order of waste management practices, from most to least preferred.

The waste hierarchy is established under the WRR Act, and is a foundation of the state waste strategy.



State waste strategy

The *Queensland Waste Avoidance and Resource Productivity Strategy (2014–2024)* was released in December 2014 and outlines the many opportunities and challenges ahead for Queensland as we work to improve our collective waste avoidance and recovery performance.

State waste strategy targets

Based on the waste hierarchy, the strategy sets clear targets to:

- reduce generation of waste
- increase the recovery and recycling of resources across all waste streams
- reduce waste to landfill, and
- improve the management of problem or priority wastes.

The Strategy sets a target for all Queenslanders to reduce the overall generation of waste by at least 5% per person over the next 10 years and reduce waste to landfill by 15% over the same period.

The Strategy acknowledges the constraints and costs of providing recycling services the further from the reprocessing hubs which are currently concentrated in the south-east of the state. At present rural/remote councils only recycle about 2% of their waste.

The state-wide target for municipal solid waste is to lift recovery from 33% to 50% by 2024. This target is split into separate targets for metropolitan, regional and remote areas. For remote areas, the strategy does not set a numerical target but asks for practices to improve as much as practicable, taking into account the distance to waste management facilities.

The Strategy also sets targets for improving the recycling rate of commercial and industrial, and construction and demolition wastes. These state-wide targets are only applicable to remote areas to the extent practicable.

The Strategy also has a target to improve the management of problem or priority wastes.

State Waste Strategy priority wastes

Priority wastes are those with high disposal impacts (such as toxicity or greenhouse gas emissions), social impacts (such as community concern or amenity), or whose recovery would present resource savings or business opportunities. The State Waste Strategy's priority wastes include:

- Plastic
 - Packaging waste
 - Plastic bottles, bags etc.
- Organic waste
 - Green waste
 - Putrescibles both domestic and commercial
- Reusable products
 - Concrete
 - Treated timber
 - Plasterboard
- Other
 - Mattresses
 - Fluorescent lights
 - Tyres
 - Oil

Boulia Shire waste facilities and services

Table 1: Boulia Shire waste facility

Town	Landfill or transfer station	Landfill Lot/address	Manned or Unmanned
Boulia	Landfill	Lot 33 on SP158998	Unmanned

Boulia landfill is unmanned with access 24 hours a day seven days a week. The site is open cut with areas where residents separate certain waste e.g. Metal, tyres, other recyclables.

A facility for the collection and recycling of waste oil is provided at the Council depot. This is removed by a registered regulated waste remover.

A total of 137 premises are charged a garbage service in Boulia township. Each premises has two bins and commercial/industrial/school/parks have multiple bins. There is a weekly kerbside collection.

Identify waste streams

Waste streams can include:

- Domestic – general household collection
- General waste (putrescible) – includes commercial (hotel/motel/café) and garden waste
- General waste (non-putrescible) includes construction and demolition, park and street, metal waste, tyres
- Hazardous waste – including chemicals, asbestos, oils etc.

As the landfill site is unmanned Council is unable to precisely identify the source and quantity of waste self-hauled by residents. Estimates of waste generation for 2013-14 are based on a volume to tonnage conversion (**Table 2**).

Table 2: Amounts and types of waste generated

Towns	Source of waste	Approx. volume total waste (t) 2013-14
Boulia	137 premises	128
	Street bins	8
	Self haul/bulk	23
	Commercial and Industrial	63
Total		222

Assessment of waste streams

Being rural in nature, the main waste stream in Boulia Shire is from domestic premises in the townships. Rural residents generally dispose of their waste on their own properties. Industry is limited generally to Council depot and associated operations, as well as a hotel, restaurant and cafe.

Due to Council's location from markets, most of the State Waste Strategy's priority wastes are unable to be collected, stored and transported. Stockpiling until there is sufficient quantity is not in most cases a viable option.

Waste surveys are undertaken annually and reported to the Department of Environment and Heritage Protection where it forms part of the state reporting by the government.

At present there are no services, markets or facilities within the shire that are providing recycling or resource recovery services, with the exception of:

- Infrequent collections by scrap metal merchants
- Waste oil is collected at the Council depot for collection by a recycler.

The Plan will encourage waste minimisation and reusing and recycling where possible at source.

The benefits for minimising and separating waste streams include:

- reducing the potential for contamination of general waste streams;
- improving the ease of waste storage, handling, disposal and tracking;
- educating employees of the importance of waste stream segregation and recycling;
- potentially generating an income from recyclable waste streams; and
- reducing the potential disposal costs for some items.

Council will assess its opportunities, over the life of the plan, to ascertain if it is able to provide additional recycling services.

Targets of waste strategy

The State Waste Strategy identifies high level targets and priority wastes to address environmental improvements or economic development opportunities. **Table 3** identifies the targets that apply to Boulia Shire.

The Plan's targets address local government waste (parks, litter, street bins etc.), household waste (domestic) and other waste not generated by Council – there are no industrial premises in the shire with the exception of the Council depots and limited commercial premises including hotels/cafes/motel.

As Boulia is currently serviced by an unmanned landfill, waste segregation and separation are undertaken by residents. This presents a challenge for determining the improvements, target projections and expected outcomes.

Table 3: Targets

Key targets and dates				
Target	2015	By 2018	By 2021	By 2024
Reduce waste disposal to landfill	Business as usual no strategy	Review	Review	Review
Increase recycling	Investigate opportunities where practicable			
Reduce generation of waste	Encourage residents and commercial operators to minimise waste through education and awareness programs, and improved recovery of organic waste.			
Improve management of priority wastes	Priority wastes for Boulia are: <ul style="list-style-type: none"> • Organics • Used oil • Tyres • Batteries • Agvet chemical drums 			

Operational and verification monitoring programs

Council will constantly monitor its waste operation including collection, storage and disposal.

This will be undertaken each year to coincide with the annual waste survey conducted by the Department of Environment and Heritage Protection. The annual figures for waste generation and disposal will provide feedback to Council on whether the target projections are on track.

There will be a review every 3 years.

Waste management initiatives

Key actions

To achieve the targets, Council will:

- Encourage residents to apply the principles of the waste hierarchy;
- Encourage the separation and segregation at source where possible;
- Ensure the safe disposal of residual and non-recoverable waste;
- Monitor litter and illegal dumping;
- Monitor the diversionary and reduction objectives;
- Work with all stakeholders to investigate and assess alternative management technologies and resource recovery markets;
- Continue to provide a level of service afforded and expected by the community.

Waste reduction - procurement

Council will adopt a policy of being selective in purchasing goods that have minimal or reusable packaging.

Purchasing better quality goods in the first place, that can be repaired rather than discarded after a short lifespan, will also reduce packaging and waste.

It will encourage double sided printing.

Council will also promote waste minimisation through sustainable purchasing to residents.

Reuse

Council can introduce a policy of reusing single sided photocopying paper.

Council will encourage residents to reuse materials for another purpose.

Recycling

With less than 2% of waste being recycled in rural remote areas, improving on this will be a challenge for Council.

However, recycling can also include mulching, and composting. As organic waste makes up almost one half of the average household's waste², diverting this waste from landfill would make a measurable reduction in disposal. There is a clear environmental benefit to diverting putrescible waste from landfill.

Alternate uses for tyres can also be explored (erosion control, perimeter screening at the landfill etc.).

"Chemcollect" scheme periodically collects unwanted agricultural and veterinary chemicals for disposal or recovery.

Council will pursue opportunities for greater reuse/recycling including:

- Steel
- Batteries
- Tyres eg. screening at landfill
- Promoting the correct use of the used oil recycling facility
- Used agricultural and veterinary chemical drums through the DrumMuster program

² Waste Account, Australia, Experimental Estimates 2013 – Main Findings, Australian Bureau of Statistics

Composting/mulching

Council will encourage residents to purchase compost bins to dispose of green waste, putrescibles and other organic material including paper and cardboard using that process.

This proposal can also be adopted by Council to address park maintenance material.

Disposal

Currently, there are no plans to significantly upgrade waste management infrastructure over the life of this Plan.

Better signage and segregation will be considered where markets are identified.

Materials such as asbestos and some hazardous chemicals like paint and solvents cannot be safely recycled. These must be disposed of at the landfill in a designated area or held for later disposal.

Community awareness

Council will enter into an awareness and education program with the community to address some of the above topics. Based on the waste hierarchy, messages to raise community awareness about waste minimisation can include the following:

Avoid

- the easiest way to avoid waste is not to purchase it in the first place. So before purchasing anything, ask yourself: Do I need it? How long will I use it for? Is it high quality and expected to last?
- avoid disposable or single use items, and use reusable items instead. Some examples include cloth nappies, rechargeable batteries, hankies and cloth napkins, refillable ink cartridges, durable razors, reconditioned furniture and appliances
- choose products with little packaging, or packaging that can be recycled
- say 'no' to plastic bags, and use reusable shopping bags instead.

Reduce

- buy in bulk where possible to reduce packaging
- buy quality items that will last longer, or that can be repaired or updated easily
- repair broken items instead of replacing them with new
- buy only what you need. Use a shopping list and try to avoid impulse purchases
- make 'nude food' lunches for your family. Use reusable containers and lunchboxes to make lunch without any waste.

Reuse

- residents can set reusable materials aside at the landfill for another person to recover and reuse
- buy second-hand or pre-loved goods wherever possible
- borrow from friends – ask around for a loan on items that you only need to use temporarily
- share with friends – share books, magazines, movies, games and clothes rather than purchasing one each
- use waste paper for scrap paper. Take old magazines to doctor surgeries
- donate unwanted clothes, furniture and household goods to charities
- reuse glass and plastic containers to store food or household items
- Reuse uses less energy than recycling

Recycle

- residents can assist with Council's resource recovery efforts at the landfill by sorting the materials in their load to ensure ease of separation and recovery
- purchase a compost bin or worm farm to create reusable products including fertiliser
- mulch green waste and use in the garden to reduce the need for watering
- recycle used oil, steel (and car batteries) correctly at the depot/landfill
- correctly segregate any other wastes according to Council signage at the landfill

Disposal

- this is the last option Council and residents should consider. "RETHINK" before disposing of waste.
- litter and illegal dumping are unsightly, degrade the environment and pose a hazard to both people and native fauna. Dispose of waste correctly in household bins, litter bins or at the landfill.
- report littering from vehicles to the Department of Environment and Heritage Protection via the online reporting system.

Effective Implementation of this Waste Reduction and Recycling Plan

The effectiveness of the implementation of this Plan relies on all key stakeholders to participate in the process. This sense of shared responsibility is a major factor of this Plan.

Awareness and education information can be on-going in the Boulia Shire Community Newsletter “Channel Country Chatter”. This will keep the focus of the waste minimisation message in the minds of the community, ensure the effectiveness of the Plan and utilise Council resources more effectively.

Review

To ensure the Plan is a living document it is essential it is reviewed regularly. It is a requirement under the WRR Act that it be reviewed every 3 years to ensure it is relevant and up-to-date.

The Plan will be reviewed every 3 years and amended as identified. An annual “health check” will also be undertaken of its operation at the time of the annual survey of waste management activities by the Department of Environment and Heritage Protection. This will provide the opportunity to assess achievements with the projected targets.