

# **WASTE REDUCTION & RECYCLING PLAN FLINDERS SHIRE**



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## 1.0 INTRODUCTION

### 1.1 Background

Under state government legislation, local governments are required to prepare, adopt and implement a plan that addresses waste reduction and recycling.

The Flinders Shire Council Waste Reduction and Recycling Plan 2016-2019 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.

## **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 within the Flinders Shire.

The objectives of this plan are to:

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

## **2.0 WHAT IS WASTE?**

Waste is classified into three distinct types that have different compositions, responsibilities and drivers for being generated.

### **2.1 Residential/domestic**

This type of waste forms the vast majority of Flinders Shire Council's (FSC) waste that is managed from kerbside wheelie bins and self-haul. This is the main waste stream that FSC and the community can control in terms of how it is collected and managed. The generation of this waste is predominantly driven by population, wealth and consumerism.

### **2.2 Commercial and industrial waste (C&I)**

This is waste from commercial activities such as retail and hospitality and varies in nature according to the type of business. The generation of this waste is driven by economic activity.

### **2.3 Construction and demolition waste (C&D)**

This is generated from building, construction, refurbishment or demolition. The predominant materials from this source are often concrete and soils, however construction generates a certain amount of timber, plastic, cardboard and other wastes such as plasterboard. The generation of this waste is driven by building approvals, construction and renovation activities.

### **2.4 Disaster waste**

Natural disasters such as storms generate large fluctuations in the volumes of municipal waste and can require additional temporary storage areas such as on top of parks.

### **2.5 Regulated waste**

Other waste that is more hazardous in nature, such as asbestos, is known as regulated waste and there are special transport and disposal conditions applying to the management of this type of waste. FSC deals with limited regulated waste such as asbestos and tyres.

## **3.0 SHIRE PROFILE**

Flinders Shire is situated approximately half way between the cities of Townsville and Mount Isa and is named after Queensland's longest river – the Flinders River. The Flinders Shire is divided by the Flinders Highway – now known as the popular tourist drive 'Overlander's Way'. The Flinders Highway runs east and west through the Kennedy Developmental Road – which runs north and south through the Flinders Shire. Encompassing the townships of Hughenden, Prairie, Torrens Creek and Stamford, Flinders Shire has become a major hub for transport and travellers alike.

The Flinders Shire has a population of 1,792 residents. The average annual growth rate for the Shire is -0.5% over 5 years and -0.6% over ten years.

The main industries in the Shire are cattle and sheep grazing, and tourism. The Shire has three prominent geological features. Porcupine Gorge in the north, Flinders River which winds from the White Mountains which is in the north-east through to the west of the Shire and Great Inland Sea. Hughenden is the centre of “Dinosaur Country”, home to many fossils including the great Muttaborrasaurus and the Queensland Pterosaur.

The Shire has four different bio-regions with ever-changing ecosystems including the Desert Uplands, Einasleigh Uplands, Mitchell Grass Downs and a small portion of Gulf Plains. Major events held in the Flinders Shire include the Annual Hughenden Agricultural Show, Hughenden Country Music Festival, Hughenden Camp draft, Porcupine Gorge Challenge, Hughenden Races, Rugby 7s Carnival as well as country race meetings held annually at Stamford, Prairie and Kooroorinya Falls Nature Reserve.

## **4.0 REGULATORY FRAMEWORK**

### **4.1 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.

### **4.2 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.

### **4.3 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.

### **4.4 Environmental Protection regulation 2008**

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

### **4.5 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.

### **4.6 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.

### **4.7 The 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.

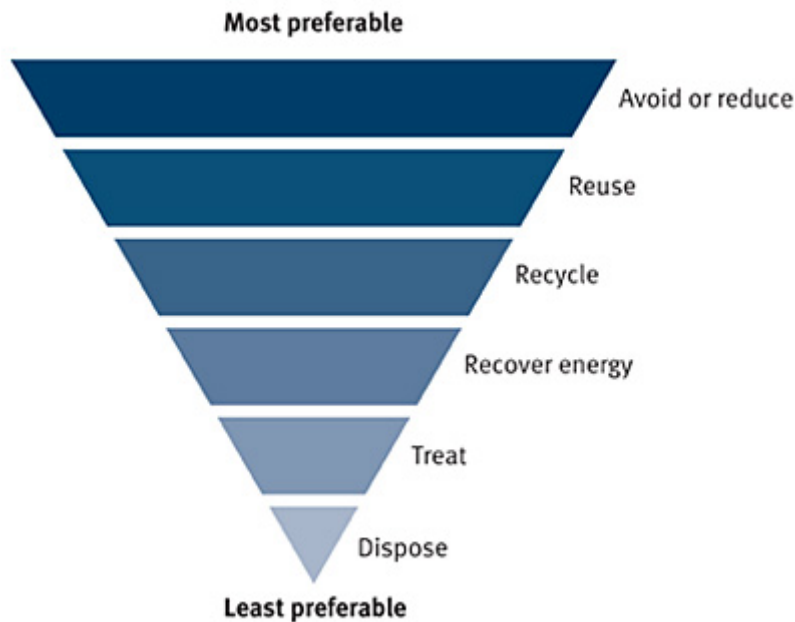
#### **4.8 Queensland Waste Avoidance and Resource Productivity Strategy 2014-2024**

The Queensland Government is working with the community and industry to develop the Queensland Waste Avoidance and Resource Productivity Strategy 2014-2024.

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 reusing, 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.

## 5.0 FLINDERS SHIRE WASTE MANAGEMENT FACILITIES

Table 1: Hughenden Landfill

HUGHENDEN LANDFILL	
Facility Type	Landfill
Location	McLaren Street Hughenden
Contact	Flinders Shire Council – (07) 4741 2900

<b>Operations</b>	<ul style="list-style-type: none"> <li>• On-site supervision by Contractor</li> <li>• General waste is delivered from kerbside collection and self-haul waste.</li> <li>• Separate areas for Green, Scrap Metal, Dead Animals, Tyres, Batteries, Mineral Oil and Asbestos waste.</li> <li>• Scrap Metal, Batteries and Mineral Oil collected and transported to recycling centres by third parties.</li> </ul>
<b>Opening Hours</b>	<p>Monday to Friday: 8am - 11am and 3pm - 6pm  Saturday to Sunday: 8am - 11am and 2pm - 6pm.  Public Holidays - 8am - 11am  Christmas Day - Closed  Good Friday - Closed  News Year Day - Closed</p>
<b>Wastes Handled</b>	<p><b>General Waste</b></p> <ul style="list-style-type: none"> <li>• Domestic Waste</li> <li>• Commercial Waste</li> <li>• Domestic clean-up waste</li> <li>• Construction and Demolition Waste</li> <li>• Industrial Waste</li> <li>• Green Waste</li> <li>• Putrescible waste</li> <li>• Solid inert waste</li> <li>• Deceased Animals</li> </ul> <p><b>Limited regulated waste</b></p> <ul style="list-style-type: none"> <li>• Asbestos</li> <li>• Fish processing waste</li> <li>• Food processing waste</li> <li>• Poultry processing waste</li> <li>• Quarantine waste that has been rendered non-infectious</li> <li>• Sludge or residue from water treatment plants</li> <li>• Sewage sludge or residue produced at a sewage treatment plant</li> <li>• Tyres</li> </ul>

Table 2: Prairie Landfill

PRAIRIE LANDFILL	
<b>Facility Type</b>	Landfill
<b>Location</b>	Muttaborra Road Prairie
<b>Contact</b>	Flinders Shire Council – (07) 4741 2900
<b>Operations</b>	<ul style="list-style-type: none"> <li>• Nil Supervision</li> <li>• General waste is delivered from self-haul waste</li> </ul>
<b>Opening Hours</b>	24 hours per day, 7 days a week
<b>Wastes Handled</b>	<p><b>General Waste</b></p> <ul style="list-style-type: none"> <li>• Domestic waste</li> <li>• Commercial waste</li> <li>• Domestic clean-up waste</li> <li>• Construction and Demolition waste</li> <li>• Industrial waste</li> <li>• Garden waste</li> <li>• Putrescible waste</li> <li>• Solid inert waste</li> <li>• Tyres</li> </ul>



Table 3: Torrens Creek Landfill

TORRENS CREEK LANDFILL	
Facility Type	Landfill
Location	Bedford Street Torrens Creek
Contact	Flinders Shire Council – (07) 4741 2900
Operations	<ul style="list-style-type: none"> <li>• Nil Supervision</li> <li>• General waste is delivered from self-haul waste</li> </ul>
Opening Hours	24 hours per day, 7 days a week
Wastes Handled	<b>General Waste</b> <ul style="list-style-type: none"> <li>• Domestic waste</li> <li>• Commercial waste</li> <li>• Domestic clean-up waste</li> <li>• Construction and Demolition waste</li> <li>• Industrial waste</li> <li>• Garden waste</li> <li>• Putrescible waste</li> <li>• Solid inert waste</li> <li>• Tyres</li> </ul>

Table 4: Stamford Landfill

STAMFORD LANDFILL	
Facility Type	Landfill
Location	Winton Road Stamford
Contact	Flinders Shire Council – (07) 4741 2900
Operations	<ul style="list-style-type: none"> <li>• Nil Supervision</li> <li>• General waste is delivered from self-haul waste</li> </ul>
Opening Hours	24 hours per day, 7 days a week
Wastes Handled	<b>General Waste</b> <ul style="list-style-type: none"> <li>• Domestic waste</li> <li>• Commercial waste</li> <li>• Domestic clean-up waste</li> <li>• Construction and Demolition waste</li> <li>• Industrial waste</li> <li>• Garden waste</li> <li>• Putrescible waste</li> <li>• Solid inert waste</li> <li>• Tyres</li> </ul>

## 6.0 WASTE PROFILE

Capturing data for the various waste streams has proved difficult in the past due to the absence of a Weigh Bridge. Estimates of waste generated for 2014 – 2015 are based on a volume to tonnage conversion (Table 4).

Table 5: Amounts and types of waste generated

Town	Collection type	Approximate Volume (t)
Hughenden	Residential Kerbside pick-up	1059.42
	Self – Haul	216
	Commercial & Industrial Kerbside	1031.8
	Asbestos	15.84
	Green Waste	32.6

Data for Prairie, Torrens Creek and Stamford is unavailable.

FSC currently recycles Scrap metal, Batteries, Green Waste and Mineral oil from Hughenden's landfill.

## 7.0 QUEENSLAND'S WASTE STRATEGY

The strategy sets targets for improving resource recovery and recycling rates and reducing landfill disposal. These targets take into account differing circumstances in metropolitan, regional and remote parts of Queensland.

Figure 1: Queensland's Waste Strategy Targets

Waste stream	Measure	2012-13 recovery baseline	2024 target
All general waste	Reduction in per capita generation	1.9 tonnes general waste per person per year	Reduce (by 5%) to 1.8 tonnes per person per year
Municipal solid waste (domestic)	Improved recycling rate	33% state <ul style="list-style-type: none"> <li>• 37% metropolitan</li> <li>• 30% regional centre</li> </ul>	50% state <ul style="list-style-type: none"> <li>• 55% metropolitan</li> <li>• 45% regional centre</li> <li>• Improve practices as much as practicable for remote areas</li> </ul>
Commercial and industrial waste	Improved recycling rate	42% state	55% state
Construction and demolition waste	Improved recycling rate	61% state	80% state
Landfill diversion target	Reduction in the amount of waste going to landfill	4,675,000 tonnes to landfill	Reduce by 15% over life of strategy
Problem or priority wastes	Improved management of each waste	Individual baselines to be developed	Individual measures to be developed

Remote areas such as Flinders Shire are encouraged to improve recycling rates as much as practicable due to location and distance from recycling facilities.

The strategy also identifies priority wastes for action. These wastes are associated with high disposal impacts (such as toxicity or greenhouse gas emissions), social impacts or whose recovery would present resource savings or business opportunities.

Figure 2: Queensland's Priority Wastes

Priority waste stream	Priority material
Plastic waste	Agricultural plastics Packaging waste Plastic bottles, bags and other consumer plastics
Organic waste	Households: <ul style="list-style-type: none"> <li>green waste</li> <li>food waste</li> </ul> Commercial premises: <ul style="list-style-type: none"> <li>hospitality</li> <li>food processing</li> </ul>
High volume wastes with an existing resource value	Concrete Treated timber Plasterboard
Regional impact waste	Mining and industry development Mattresses Orphan agricultural and veterinary chemicals
Complementary national product stewardship measures	Fluorescent lights Used tyres Used oil

Council currently recycles two of these priority wastes - used oil and green waste. Unfortunately Council is unable to recycle many of the priority wastes due to distance from recycling facilities.

## 8.0 WASTE REDUCTION TARGETS

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

The targets are as follows:

Table 6: Waste Reduction targets

Target	Strategic Action
Target 1 Improve current Waste Monitoring System by February 2017.	<ul style="list-style-type: none"> <li>Investigate current monitoring and reporting systems.</li> <li>Increase the ability for capturing and managing waste management data.</li> </ul>
Target 2 Develop and implement a Waste Reduction and Recycling Public Education Strategy by March 2017.	<ul style="list-style-type: none"> <li>Identify public audience groups.</li> <li>Identify Council resources for use in public education.</li> <li>Develop a plan to build public knowledge for sustainable waste management behaviour.</li> </ul>
Target 3 Improve management of the following priority wastes: <ul style="list-style-type: none"> <li>Plastic wastes</li> <li>Concrete</li> <li>Timber</li> <li>Mattresses</li> <li>Agvet chemical drums</li> <li>Tyres</li> </ul>	<ul style="list-style-type: none"> <li>Investigate future recycling opportunities.</li> </ul>

## **8.1 Operational and verification monitoring programs**

Council will monitor its waste operation including collection, storage and disposal. This will coincide with the annual waste survey conducted by the Department of Environment and Heritage Protection. The annual figures will provide feedback to Council on whether the target projections are on track.

## **9.0 CONSULTATION AND REVIEW**

### **9.1 Consultation**

The draft plan will be released for public comment on Tuesday 30<sup>th</sup> August 2016. The draft plan will be available for viewing on Council's website along with details on how to make a submission. Community consultation will close at 5.00pm on Tuesday 30<sup>th</sup> September 2016. 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 November 2016 Ordinary Council meeting.

### **9.2 Review**

The plan will be reviewed every three years in accordance with the *Waste Reduction and Recycling Act 2011*. Any amendments that will substantially affect the operation of the plan must be adopted by Council if considered appropriate, having regard to changing waste reduction and recycling opportunities, changing circumstances in which the plan operates and any other matters arising from a review of the plan.