



**MIDCOAST**  
council



## **WASTE MANAGEMENT STRATEGY 2030**

Reduce, reuse, recycle... re-imagine waste



## Acknowledgements

The MidCoast Council Waste Management Strategy was developed by the Council Waste Services team and prepared for publication by the Council Communications team. Thanks to Robert Bailey and Tania Parkinson who undertook the peer review.

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## Preface

Communities worldwide are leading the way in imagining a future which is less wasteful of resources and which protects the natural environment from harm. Concern about the crisis of plastic waste in our oceans and waterways is one example of the global impact of waste.

These concerns are shared by the residents of MidCoast Council. Our guiding document *MidCoast 2030 Shared Vision, Shared Responsibility*<sup>1</sup> states:

*Our natural environment is protected and enhanced, while we maintain our growing urban centres and manage our resources wisely.' This value is to be realised by:*

- *Sustainably managing our waste through reduction, reuse, recycling and repurposing*
- *Proactively managing our resource consumption.*

The focus on recycling and repurposing is good news for the local economy. A circular economy approach keeps resources in use within the economy for longer. This has the benefit of reducing demand for new resources while also providing employment. Reuse and recycling employs an increasing number of people in sustainable and secure jobs covering technical, commercial and operational skills.

*Reimagine Waste, the MidCoast Waste Management Strategy*, focuses on how we can sustainably manage our waste until 2030. It establishes priority areas for our Council so we can better manage waste as a valuable resource and reduce the environmental impacts of waste disposal. The ambitious targets for waste avoidance and reduction in the strategy will require change in practices by all sections of the community.

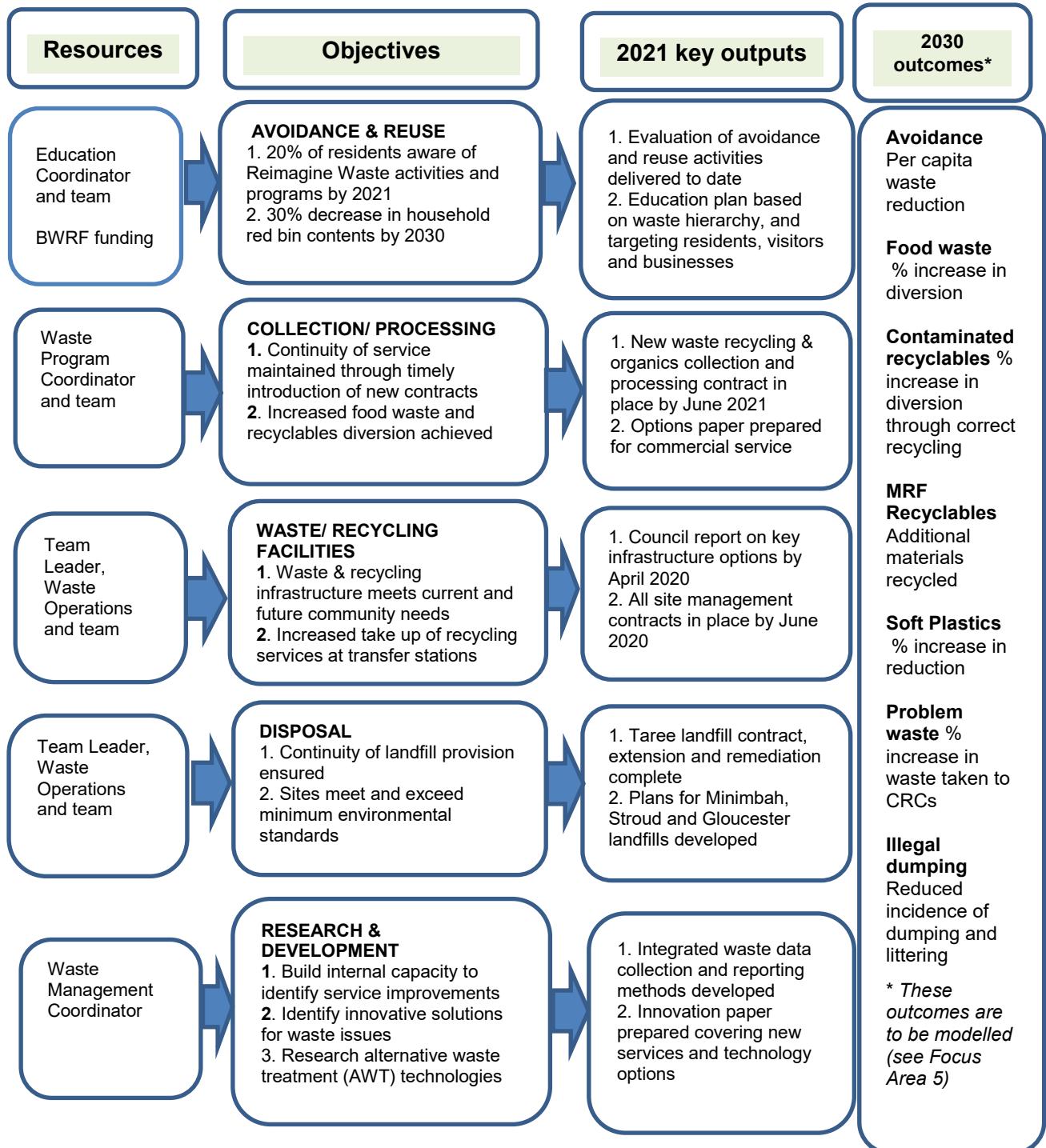
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<sup>1</sup> *MidCoast 2030 Shared Vision, Shared Responsibility* Community Strategic Plan, p. 9

## Strategy in brief

**Service delivery goal:** All waste collection, recycling and site management plans and contracts in place by 2021

**Diversion goal:** 75% of waste diverted from landfill by 2030, up from 63% at 2018



**Oversight of Strategy and Action Plans:** Waste Management Coordinator

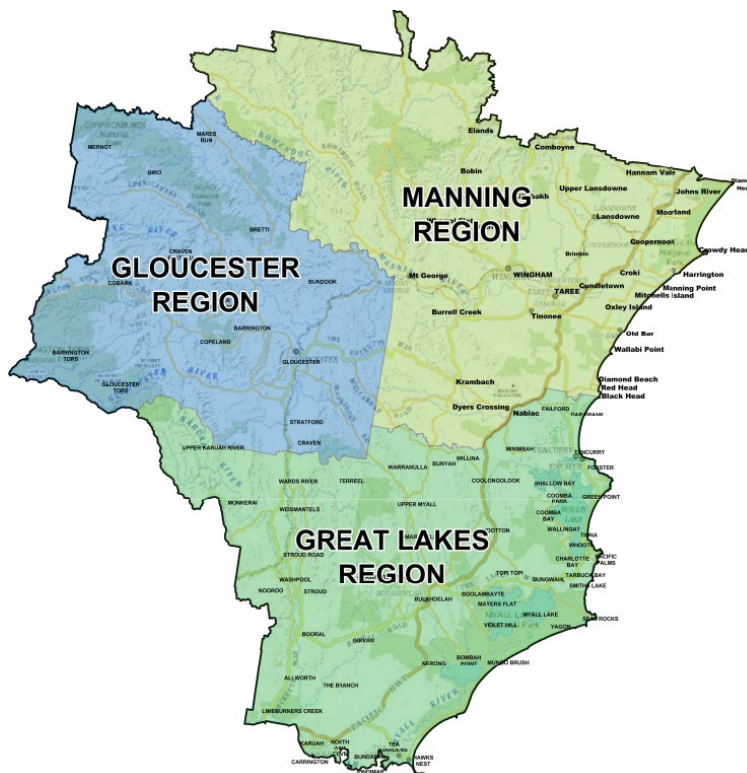
**Monitoring and review:** Evaluation built into each delivery area, monitored monthly and reported annually to Council

# Introduction

## About Council

MidCoast Council was formed by NSW Government Proclamation on Thursday 12 May 2016 through the merger of the former Great Lakes, Greater Taree and Gloucester Shire Councils. The geographical region of 10,052 square kilometres extends from the mid north coast of New South Wales west to the escarpment of the Great Dividing Range. The area spans from coastal beaches to mountains in the hinterland and numerous national parks and green spaces in between. The population of 92,000 occupies 40,000 households and is spread across 196 towns, villages and localities<sup>2</sup>.

Figure 1: MidCoast Council area



## About this Strategy

This Strategy:

- Builds on the waste management plans of the three former Councils and seeks to address the challenges posed by a larger geographic area and population
- Takes the opportunity presented by a greater number and diversity of waste facilities and services to set new directions and targets for the next five years and aspirational goals for the next ten years
- Addresses community concern about waste, sets targets for increased diversion from landfill and recommends specific measures to meet those targets.

<sup>2</sup> MidCoast Council web link to ID

It is aligned with the NSW Waste Avoidance and Resource Recovery (WARR) Strategy 2014–21. As a member of the voluntary waste group, the Midwaste Regional Waste Forum<sup>3</sup>, MidCoast Council contributes to the Midwaste WARR Strategy. See Appendix 1 for more details of the policy context.

## Vision and guiding principles

The Council vision guiding this strategy is to sustainably manage our waste through reduction, reuse, recycling and repurposing and to proactively manage our resource consumption.

The decision-making process informing the proposed actions is also guided by the following principles adapted from the charter for councils<sup>4</sup>:

- Provide, after due consultation, adequate, equitable and appropriate services and facilities for the community
- Properly manage the environment of the areas for which Council is responsible, in a manner that is consistent with and promotes the principles of ecologically sustainable development
- Have regard to the long term and cumulative effects of Council decisions
- Bear in mind that Council is the custodian and trustee of public assets and effectively plan for, account for and manage the assets for which Council is responsible
- Engage in long term strategic planning on behalf of the local community.

## Feedback from the community

Council seeks the views of the community in a variety of ways. In early 2018 the Midwaste Regional Waste Forum surveyed 900 residents on behalf of their member Councils including 150 residents from the MidCoast area.<sup>5</sup> One third of MidCoast residents surveyed either said Council did a good job or they had no specific comments. The comments raised by the remaining respondents are summarised below.

- Need for the same services across all Council areas
- Mulch should be made available at more Community Recycling Centres
- Tip fees too high, especially for green waste; fees resulting in the potential for dumping
- Requests for either tip vouchers or for bulky waste clean ups
- Food waste to be collected in the green bin, similar to neighbouring councils such as Port Macquarie
- More information and education about what can be recycled where, eg. small batteries
- Assurance that collected items are recycled and more information about where it goes
- More enforcement of correct recycling is required
- All sorts of plastics should be recycled
- Collection of farm waste such as bulka bags, fertiliser bags and silage wrap
- Too much waste going to landfill
- More investigation of illegal dumping
- Issues about frequency of particular services, eg weekly green bin in summer months
- Award scheme and incentives for businesses that minimise packaging.

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<sup>3</sup> Midwaste comprises Coffs Harbour City Council, Port Macquarie-Hastings and MidCoast Councils and Bellingen, Nambucca and Kempsey Shire Councils

<sup>4</sup> New South Wales Local Government Act, Section 8, The council's charter

<sup>5</sup> Midwaste Regional Waste Forum 2018 Waste Survey, conducted by Jetty Research

Residents made comments in relation to the *Return and Earn* cash for container program and expressed interest in seeing more locations established. Although Council does not run the program, it supports the establishment of new *Return and Earn* vending machines at appropriate locations, for example at the Tuncurry Waste Management Centre.

Consultation for Council's Community Strategic Plan also produced suggestions around waste services, including:

- Run plastic-free initiatives and educate people about the damage of plastics
- Build infrastructure to accommodate the processing of recycled materials for paper, glass, metal, plastics, etc.

The community will be further consulted about specific proposals arising out of this strategy.



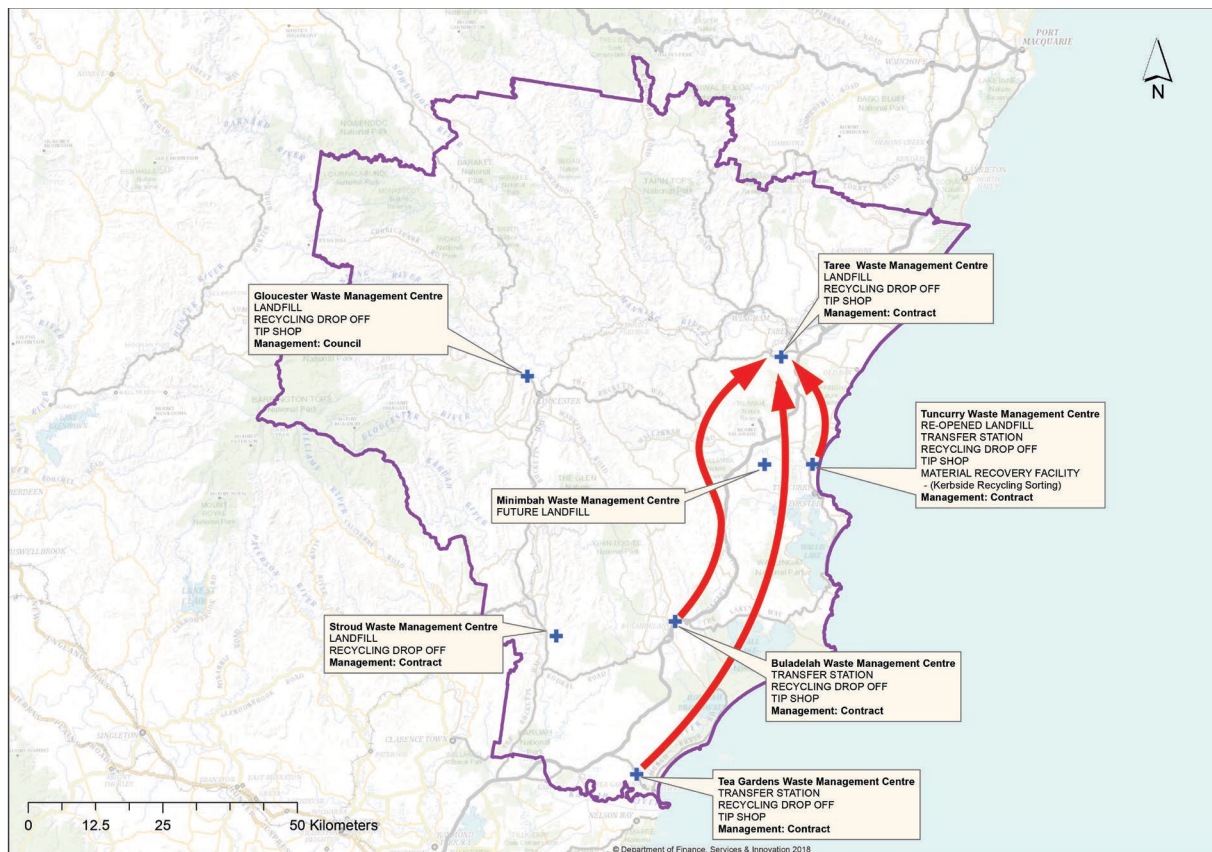
# Waste and resource recovery in the MidCoast region today

## Waste facilities and assets

Council's waste and recycling facilities and infrastructure, which are managed through a combination of Council run operations (day labour) and contracted services are briefly outlined below. See Appendix 2 for more detail.

Figure 2: Map of current Council waste facilities and disposal

 Arrows indicate waste transported to Taree Waste Management Centre (landfill) for disposal.



Waste facilities that include landfill for waste disposal are based at Taree and in Stroud and Gloucester. The former Tuncurry landfill reopened in July 2019 on a temporary basis. The planned new landfill at Minimbah has been put on hold since the formation of MidCoast Council.

Waste transfer stations are located at Taree, Tuncurry, Bulahdelah and Tea Gardens. Transfer stations are drop off centres designed to encourage the sorting, reuse and recycling of as much waste as possible. Only non-recyclable waste is sent to the Taree landfill for disposal.

The Material Recovery Facility (MRF), which takes all recyclable materials, is based at the Tuncurry Waste Management Centre.

The following materials are separated and sold for reprocessing into new products:

- Steel & Aluminium
- Rigid plastics
- Paper & Cardboard
- Glass

Recyclable material from all waste facilities is taken to the MRF for processing. In partnership with the NSW Environment Protection Authority (NSW EPA), Community Recycling Centres, which take particular problem wastes for recycling, operate at Taree, Tuncurry and Gloucester waste facilities.

Council waste assets include 734 public place waste and 161 recycling bins located throughout the MidCoast local government area\*.

Taree:	354 waste & 81 recycling bins
Forster:	351 waste & 57 recycling bins
Gloucester:	29 waste & 23 recycling bins

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*\*These figures increase during holiday times and bulk bins are also put out.*

Reuse shops (Tip shops) operate at Taree, Tuncurry, Gloucester, Tea Gardens, Bulahdelah and Stroud waste facilities.

## Current kerbside waste collections

Most households in the region receive a weekly waste collection service and a fortnightly recycling and green waste service. Due to the rural nature of much of the region, a number of properties use a common collection point or drop their waste and recycling off at landfill facilities and transfer stations.

MidCoast Council currently operates a contract with the waste company JR Richards & Sons to provide these kerbside collection services.

### **Waste (red bin)**

General waste from the whole local government area is delivered to one of our licenced landfills, either the Taree Landfill or the Gloucester Landfill.

### **Recycling (yellow bin)**

Recyclables are delivered to the Material Recovery Facility (MRF) at Tuncurry Waste Management Centre.

### **Organics (green bin)**

Green waste is delivered to one of our licenced waste facilities. At our facilities, green waste is mulched and either used as EPA-approved cover material on the capped landfills, windrowed and pasteurised for residents to use, or further processed via the Material Aerated Floor (MAF) system. The MAF system is a modular design that delivers uniform forced aeration to static compost piles.

In addition to kerbside collections, Council provides collection services for bulky waste and for public place and street litter.

## Summary of waste generated

The waste and recycling data underpinning this strategy is based on information collated from our six waste facilities. The following graph represents 2018 rounded figures on the sources of materials received by our facilities - Municipal Solid Waste (MSW), Commercial and Industrial Waste (C & I) and Construction and Demolition (C & D).

The diversion rate of 63% is inclusive of all waste diverted from these three sources.

### MidCoast area waste profile 2018

Council-run facilities received 121,000 tonnes of material in 2017/18.

- 65% (78,000 tonnes) was generated by households, public places and Council operations (MSW)
- 19% (23,000 tonnes) was generated by commercial premises (C & I)
- 16% (20,000 tonnes) was generated by building and construction businesses (C & D)

Of the 121,000 tonnes, 37% (44,000 tonnes) went to landfill and 63% (77,000 tonnes) was re-directed to a range of recycling facilities or for reuse.

## Residential waste and recycling

In 2017/18, MidCoast Council collected an estimated total of 40,000 tonnes of waste from household kerbside collections. The annual estimates are shown in Figure 3 below. The relative percentages fluctuated throughout the year, which accounts for the differences in results from one-off audits. eg. the amount of green waste generated was higher in the summer months. <sup>6</sup>

Table 1: MidCoast Council kerbside waste, organics and recycling tonnages for 2017/18

Waste	Organics	Recycling	Total tonnages
20743.58	9083.96	10109.5	<b>39,937.04</b>
51.94%	22.75%	25.31%	100%

Based on 40,000 households in the area these tonnages equate to approximately one tonne per household. Organics and recycling combined represents 48.21% which equates to approximately half a tonne for each household.

In addition to the kerbside collection, residents take waste, recycling and organics to Council facilities and put out items for bulky waste collections. In 2017/18 residents put out 2,042 tonnes of bulky waste, most of which was disposed in landfill, and 83 tonnes of problem waste which was diverted from landfill<sup>7</sup>. See Appendix 3 for more detail.

Waste from Council operations is included in the total amount of Municipal Solid Waste. In 2017/18, 14,600 tonnes of clean fill from road construction was taken to the Taree Waste Management Centre and used as landfill cover.

<sup>6</sup> MidCoast Kerbside Collection audit 2017

<sup>7</sup> EPA funded Community Recycling Centres arrange specialist recycling services for problem waste

## Commercial and construction waste and recycling

Businesses are responsible for making arrangements for the collection of their own waste however Council seeks to influence the recycling performance of the commercial sector in partnership with the State government and industry.

The term commercial and industrial (C & I) waste is the term given to all non-residential waste streams produced by businesses and institutions including schools and hospitals. Construction and demolition (C & D) waste is a general term for a diverse range of materials that when segregated, can include high value materials and resources for new construction<sup>8</sup>. Materials include concrete and bricks, asphalt, metals, timber, plasterboard, plastics and excavated earth.

The total amount of commercial waste generated is not known however the majority of this waste stream is taken to Council facilities. Table 2 below shows the amounts of non-residential waste received at our facilities.

*Table 2: Breakdown of the tonnages of municipal waste, commercial and industrial, and construction and demolition waste received at each site in 2017/2018.*

Site Location	Facility Type	Method	MSW	C&I	C&D	SITE TOTAL
Tuncurry	TS	Weighbridge	20,859.89 *	8,488.54	3,311.42	32,659.85
Bulahdelah	TS	Conversion	313.89	24.68	0.18	338.75
Stroud	TS and Landfill	Conversion	907.82	6.42	7.98	922.22
Tea Gardens	TS	Conversion	2,143.36	124.78	288.30	2,556.44
Taree	TS and Landfill	Weighbridge	46,722.82 **	13,453.02	15,935.14	76,110.98
Gloucester	TS and Landfill	Weighbridge	3,515.50	831.74	169.42	4,516.66
<b>TOTALS</b>			<b>74,463.28</b>	<b>22,929.18</b>	<b>19,712.44</b>	<b>117,104.90</b>

\*7970.38 tonnes of clay capping material was received at Tuncurry Waste Management Centre for final capping purposes but is not reflected in the tonnes above.

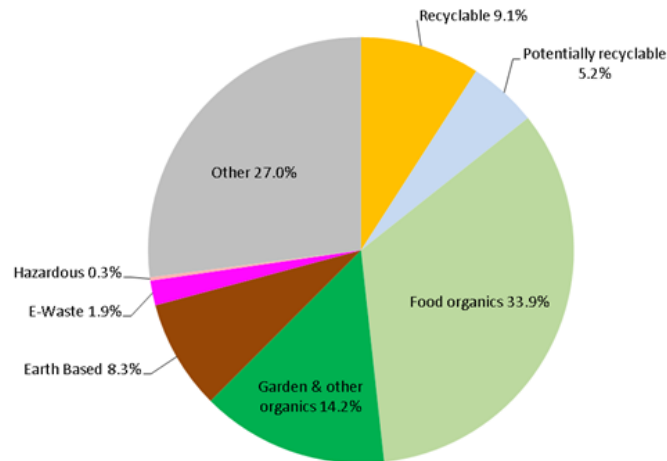
\*\*3286.60 tonnes of residual waste was disposed of at BWLF from Tuncurry, Tea Gardens & Bulahdelah Transfer Stations that is not reflected in the tonnes above.

<sup>8</sup> Australian Government (2012) *Construction and Demolition Waste Guide – Recycling and reuse across the supply chain*

## Waste composition

At regular intervals the Midwaste Regional Waste Forum conducts independent waste audits of residential kerbside collections on behalf of its members. The purpose of the audit is to assess the quantities of potentially recyclable material in the waste bins and the quantities of non-recyclable material in the recycling and organics bins. Figure 3 shows a detailed breakdown of waste bin composition, which indicates the potential to capture additional recycling and to further divert problem wastes.

Figure 3: MidCoast Council area general waste composition, February 2017



While the results of the *Return and Earn* cash for container program are still to be quantified, it is expected to have a significant impact on the composition of waste and recycling streams in the future.

It can be seen from the chart above that the greatest potential for waste reduction is in the area of food waste and organics. There is also a significant proportion of compostable waste produced in the commercial sector. Options for a food waste collection service are presented in this strategy.

## Waste forecast

Information on numbers and types of households and projected future growth underpins planning for new waste services and contracts<sup>9</sup>. The current population of 92,000 represents approximately 40,000 households. During the timeframe of this strategy it is expected to grow to close to 48,000 households. The projected increase in population and number of households, based on Australian Bureau of Statistics data, is shown below in Figure 6.<sup>10</sup> It is a guide only and should be reviewed every five years.

Taree and Forster/Tuncurry will continue to be the focus of population and economic growth. The trend for above average growth in coastal centres is expected to continue, subject to land releases. Slower growth is anticipated in rural centres. Of relevance to planning services is the vacancy rate (around 15% of dwellings), which indicates holiday homes. The largest vacancy rate is in Pacific Palms at 64% and the lowest is in Nabic at 3%.

<sup>9</sup> Urban Land Monitor 2016-2036, Part A: Findings and Directions, Sep 2018 (draft)

<sup>10</sup> <https://forecast.id.com.au/midcoast/population-households-dwellings>

Table 3: MidCoast Council area forecast population, households and dwellings

MidCoast Council	Forecast year				
Summary 2036	2016	2021	2026	2031	
Population	91,958	95,583	100,323	106,449	113,147
Change in population (5yrs)		3,625	4,740	6,126	6,699
Households	40,661	42,490	44,867	47,779	50,843
Dwellings	47,981	50,276	53,199	56,665	60,270
Dwelling occupancy rates	84.74	84.51	84.34	84.32	84.36

Analysis of the types of dwellings in the MidCoast Council area in 2016 shows that 77.9% of all dwellings were separate houses, 14.8% were medium density dwellings and 3.8% were high density dwellings.

### Fees and charges

Residents frequently ask about the domestic waste charge and other fees and charges and how those fees are determined. In addition to funding kerbside, public place bin and bulky waste collections, waste management charges help cover the operation of recycling and re-use facilities and all costs associated with landfill, from environmental compliance and levies through to costs of managing sites after closure. A summary of current Council Waste Management Charges can be found the MidCoast Operational Plan 2018 - 2019<sup>11</sup>. Further refinements to waste service charges are recommended in the Operational Plan and rates charges will be aligned in 20/21. The long term financial plan currently being prepared will be reflected in future updates of this strategy.

All scheduled waste facilities are required to pay a levy on each tonne of waste to the NSW Government<sup>12</sup>. The levy is designed as an incentive to reduce waste generation and encourage resource recovery. MidCoast Council pays \$82.70 per tonne of waste which amounts to over \$4.5m annually Community Recycling Centres based at Tuncurry, Taree and Gloucester allow members of the public to dispose of household quantities of specific recyclable materials free of charge.

<sup>11</sup> <https://www.midcoast.nsw.gov.au/Council/Plans-and-reports>

<sup>12</sup> NSW POEO Act, Section 88 requirement; fees reflect rates for 2017/2018

# Objectives and targets

## Strategic objectives

1. By 2021 all waste, recycling and site management plans and contracts requiring renewal are in place
2. By 2030, waste diversion from landfill has increased from the current rate of 63% to 75% in line with the NSW WARR Strategy. It is noted that this objective can only be achieved in partnership with the NSW State Government, industry providers, residents and businesses of the MidCoast Council area. Council progress towards meeting this target will be incremental as the strategy is progressively implemented.

Table 4: Targets

2030 Targets	Measures of progress
<b>Targets for diversion from landfill</b>	
Support NSW Government diversion target of 75% Increase waste diverted from landfill by an additional 14,000 tonnes	Measure based on Council facilities weighbridge records
<b>Targets for residents</b>	
Decrease residual waste generated per household by 30% (baseline is 2017/18 estimates of 500 kgs generated per household per annum)	Annual tonnages plus audit of kerbside red bins
Reduce problem waste sent to landfill by 50%	Audits of kerbside bins
<b>Targets for businesses</b>	
Support NSW Government recycling target of 70% for commercial waste	Tonnages of particular waste streams reprocessed, including organics
<b>Targets for Council operations</b>	
Increase recyclables collected from Council's own operations (offices, depots and construction waste) by 30%	Audit of bins at Council facilities

## Issues impacting on resource recovery objectives

Characteristics of the MidCoast area which need to be taken into account in planning for future services include population movements and fluctuations during holiday periods and distances between towns and facilities. These variables will need to be reflected in the more detailed action plans that flow out of this strategy.

### **Availability of markets**

The availability of markets for recycled products is critical to meeting strategy targets. The loss of the China market for recyclable materials due to the China National Sword Policy has resulted in the need for new markets for a number of products. Markets in other countries that currently take recyclables from Australia are also at risk. If recycling markets are to be sustained over the long term it will be essential to deal with the current levels of contamination in recyclables. Returning to single stream sorting may be required to reduce contamination to acceptable levels.

### **Government leadership**

Other external influences that affect the ability of Council to achieve targets include changes to national and State regulation and government leadership in establishing price signals and incentives.

The challenges in finding and maintaining markets for recycling has been an impetus for the promotion of circular economy<sup>13</sup> principles and practice by Australian governments. In the Research and Development Focus area of this strategy it is recommended that Council research new opportunities for locally based circular economy opportunities. To do this successfully it will be essential to have State government leadership and support.

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<sup>13</sup> A circular economy values resources by keeping products and materials in use for as long as possible



# Future directions

This document sets out proposed directions and actions designed to meet both operational and strategic objectives. It is noted that a number of the proposed actions will require further research and consultation. The actions are grouped under five focus areas which are broadly aligned with the waste hierarchy<sup>14</sup> set of priorities:

1. **Avoidance** including action to reduce the amount of waste generated by households, industry and all levels of government
2. **Resource recovery** including re-use, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources
3. **Disposal** including management of all disposal options in the most environmentally responsible manner.

Governments worldwide, including Australian governments, are adopting circular economy principles, which in essence mean reducing waste by keeping resources circulating in the economy for longer. The restrictions placed on recyclable materials by China are requiring new approaches and the need to reduce dependency on international markets.

The interrelationships between the focus areas are acknowledged. For example changes in consumer behaviour and preferences can influence the type of service provided, while the provision of accessible services can influence recycling and reuse behaviour.

It is critical to any future resource recovery effort that current collection, processing and disposal functions are secured and functional. This strategy includes immediate decisions that need to be made in order to plan for the medium to long term. These include:

- Collections and processing arrangements and what services Council will offer
- Whether to go to the market (contract) for management and operational services or resume Council direct management of some or all waste facilities and landfills.

In addition to an indication of the timeframe for each action, information is provided on the funding source whether from the Council waste budget, waste service reserves, grant funding, or if it is currently unfunded. The NSW Government Better Waste & Recycling Fund (BWRf) is available to councils that pay the waste levy on an annual basis. BWRf funds currently allocated to actions are specified.<sup>15</sup> Some actions, in particular advocacy to other levels of government are best undertaken jointly with other councils through shared membership of the Midwaste Regional Waste Forum.

## Key to the Tables of actions on the focus areas

Timeframe	Immediate	Short term	Medium term	Long term
Period	6 months	1 – 2 years	3 – 5 years	➤ 5 years

<sup>14</sup> <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/warr-strategy/the-waste-hierarchy>

<sup>15</sup> MidCoast Council currently receives approximately \$120,000 per annum of BWRf funding

## Focus Area 1 – Waste avoidance and reuse

Reducing and avoiding waste is at the top of the waste hierarchy. As individuals and businesses make their own purchasing decisions, they must take responsibility for reducing the volume of waste they create. However through economic incentives such as the waste levy, and education on alternatives, state and local governments can facilitate less wasteful practices. Circular economy principles can also be applied to assist businesses rethink how they design, assemble and package products with waste avoidance as a goal.

NSW Government research shows that efforts to promote behaviour change are most effective when they are informed by knowledge of the target groups<sup>16</sup>. Most people (82%) interviewed for the study claimed a concern for the environment and the desire to recycle correctly. Council aims to support the community to make changes to their practices through education, creating opportunities for reuse and through supporting innovative solutions. For the small minority of people involved in illegal dumping and littering, enforcement options are available to Council.

Households currently generate half a tonne of waste per year on average through the kerbside collection, which equates to about ten kilograms on average each week. The waste reduction target for households is 30% by 2030, which equates to seven kilograms being generated on average each week.

### Current initiatives

Reimagine Waste is the over-arching theme for activities designed to encourage and inspire change in attitudes and behaviour amongst MidCoast residents. Current programs dealing with specific waste streams include:

- Workshops, training and equipment to encourage composting of food waste which comprises around 34% of household waste
- Promotion for Tip Shops and Op shops to encourage reuse of second hand items
- Campaigns around clothing reuse, to reduce the disposal of textiles which comprise around 5% of household waste
- Tours of the Material Recovery Facility at Tuncurry and general community and schools recycling education aimed at reducing contamination in the yellow recycling and green organics bins
- Visits by the Council mobile recycling trailer to smaller towns to provide information and a problem waste collection service
- Council 'Walk the Talk' initiatives designed to reduce internal waste production.

Focus Area 1 seeks to build on these initiatives in partnership with neighbouring councils, industry and community groups and Council contractors. See also Focus Area 5, for ways to support circular economy practices within the MidCoast region.

### Objectives

- ✚ Increase the uptake of waste avoidance and reuse initiatives by community and business
- ✚ Decrease in the average household red bin contents by 30% by 2030
- ✚ Extend the Council Walk the Talk program to include purchasing of products with recycled content
- ✚ Evaluation and reporting framework developed to enable monitoring of activities against Strategy targets for waste avoidance

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<sup>16</sup> Waste less, Recycle More community benchmark study, NSW EPA

## Actions

Table 5: Actions – Waste avoidance and reuse

Recommended actions	Details	Timeframe	Funding source and budget estimate
<b>i. Prepare a five year ‘Reimagine Waste’ education and engagement plan with a focus on waste avoidance</b>	Plan will incorporate a comprehensive suite of actions tailored to the needs of households, schools, businesses, visitors and Council staff, and will target specific waste streams	Short /Medium	Council waste budget \$5k
<b>ii. Extend existing reuse and repair initiatives</b>	Develop and promote partnerships with government and community based reuse initiatives and workshops	Short	Council Waste budget \$5k p/a BWRP Midwaste grant funding
<b>iii. Continue programs that assist households further avoid food waste</b>	Expand the reach of home and community composting programs, including Scraps to Soil workshops, Online compost bin offer and community composting hubs	Short	BWRP \$20k p/a Midwaste funding \$10k p/a
<b>iv. Focus efforts to encourage correct recycling to avoid disposal of collected recyclables</b>	Undertake targeted campaigns to reduce contamination in household and public place recycling, increase use of Community Recycling Centres and the mobile recycling trailer for problem waste	Short	Recycling contractor \$80k p/a* <i>*Includes Education officer</i>
<b>v. Expand Council ‘Walk the Talk’ program</b>	Program to include updating of purchasing policies to favour waste avoidance and purchase of recycled products	Medium	BWRP \$10k p/a * <i>*until 2021</i>
<b>vi. Advocate for industry responsibility for packaging waste</b>	Focus on packaging industry targets to replace single use non-recyclable products	Medium	Midwaste \$5k p/a

## Focus Area 2 – Collection and processing

The current waste collection and processing contract is a regional initiative of the three former councils under the banner of 'MidCoast Waste Services'. The current contract with JR Richards & Sons for waste collection and recycling processing at the Tuncurry MRF expires 30 June 2021 after 2 x 1 year extensions granted to the contractor. The total contract term is 12 years. The numerous stages and complexity involved in preparing specification and the tender documents, reviewing responses, appointing contractors and factoring in time for the new contractor to establish the necessary infrastructure, makes this action an urgent priority.

Council has the opportunity to make significant progress towards the recycling target through providing new services to households, in particular a food waste collection service and reducing contamination in recycling and organics collections. Understanding the level of service that the community expects from Council and the affordability of these services is currently being researched.

Waste, recycling and organics collection from businesses also presents a significant opportunity to reach waste diversion targets, and is a priority for investigation.

### Objectives

- ✚ Maintain continuity of customer service through the timely introduction of the new waste and recycling contract in 2021
- ✚ Research and introduce a combined food organics and garden organics (FOGO) collection system for the MidCoast Council area
- ✚ Investigate options to expand commercial collection services to influence business recycling rates
- ✚ Quantify the contribution to landfill diversion targets from proposed new collection services.

## Actions

Table 6: Actions – Collection and processing

Recommended actions	Details	Timeframe	Funding source
<b>i. Research options for introduction of a FOGO collection service and initiate public consultation</b>	Research to include case studies, technology options, and end markets	Immediate	Council waste budget \$5k
<b>ii. Prepare technical specifications and go to tender for waste, recycling and organics collection services</b>	Tender to include FOGO collection, public place bin collection, cleaning and maintenance and collection of illegally dumped materials	Immediate/ short term	Council waste budget \$45k
<b>iii. Influence the diversion of bulky waste sent to waste facilities</b>	Decision on future of bulky waste service and the options for this service	Short term	Council waste budget \$5k
<b>iv. Explore options for Council to expand commercial collection services</b>	Investigate cost and benefits of providing service to businesses, and potential contribution to reduction targets	Medium term	Council waste budget <i>N. Included in tender specifications</i>
<b>v. Better manage waste and litter generated by visitors and holiday makers</b>	Develop tailored waste information and services targeting visitors, accommodation services and special events	Medium/ long term	Seek grant funding

## Focus Area 3 – Waste and recycling facilities

MidCoast Council has seven waste facilities inherited from the previous Councils (see Appendix 2 for details) and a priority is to ensure the future planning for these sites meets the long term needs of the community. Since 2016 the Tuncurry Waste Management Centre has been upgraded through significant investment of Council and State Government resources. It represents a model community facility for integrated reuse and recycling when planning how to improve other facilities. While Tuncurry/Forster and Taree facilities service the main population centres, Council is committed to ensuring improved services to smaller centres. In seeking equity in service provision, planning for the establishment of a new transfer station to service the northern end of the local government area is desirable.

All facilities are managed under external contract except for the Gloucester Waste Management Centre, which is currently operated by Council staff. Management contracts have expired and operate on a month-to-month basis for the Tuncurry, Tea Gardens, Bulahdelah and Stroud Waste Management Centres. The management contract of the Taree Waste Management Centre expired on 30 June 2019. Two 1 year extensions are available under the terms of the existing contract.

Decisions about the future of the facilities will be based on evaluation of required service levels and the best way to provide those services. Considerations include the resumption of direct control by Council for all sites or portions of site operation, or to extend an offer for outside solutions to manage all or parts of Council waste facilities.

### Objectives

- ✚ Determine the appropriate suite of services at each location and terms of operation for transfer stations
- ✚ Undertake an initial feasibility study for a waste transfer facility in the northern part of the Council area
- ✚ Make recycling choices easier for residents through the design, accessibility and promotion of facilities.

### Actions

The focus of these priority actions is determining appropriate services and facilities management and ensuring the required infrastructure is provided to support those services. Promoting these services to the community is integral to their success.

Table 7: Action – Waste and recycling facilities

Recommended actions	Details	Timeframe	Funding source
<b>i. Prepare a plan for integrated network of waste and recycling facilities and suite of services</b>	Options paper to include a cost/benefit analysis of the main options required for future facilities management including closure of Stroud landfill and replacement with waste transfer infrastructure.	Immediate/short term	Council waste budget \$250k
<b>ii. Ensure management contracts are in place for sites where contracts have expired</b>	Prepare specifications and tender processes for the management of Tea Gardens, Bulahdelah, Stroud and the Tuncurry facilities	Immediate	Council waste budget \$45k
<b>iii. Complete remaining projects associated with Tuncurry and Tea Gardens Waste Management Centres</b>	Projects include completion of Transfer Station, Community Solar System and Tea Gardens WMC weighbridge	Immediate/short term	BWRF EPA Council waste budget
<b>iv. Review master plan and undertake essential improvements to the Taree Waste Management Centre</b>	Measures include improvements entry to Taree WMC (new pavement, improved drainage) and to the Tip Shop precinct	Medium/long term	Council waste budget \$500k
<b>v. Develop a communication plan for the suite of Council waste facilities</b>	Under the <i>Reimagine Waste</i> umbrella, promote the recycling and reuse services provided at Council facilities on an ongoing basis	Short term	Internal staff resources
<b>vi. Undertake a feasibility study for a waste transfer station in north of the MCC area</b>	Growing coastal communities in the north of the Council area need accessible waste services	Long term	Council waste reserves \$1.5m

## Focus Area 4 – Waste disposal

While this strategy has a focus on waste reduction, it is acknowledged that waste disposal facilities will continue to be required for residual waste. An immediate priority is to ensure landfill requirements for the Council area are met in a timely manner. There is a risk that the remaining space in the Taree landfill will be filled before the new proposed extension is ready. Options for consideration include the opening of Minimbah landfill to meet projected demand. Decisions around landfill are also critical to the costing of the next collection contract.

Environmental considerations are significant in the planning and management of landfills, in particular the prevention of leachate and the potential capture of methane gas emissions. Landfill gas extraction was considered at Tuncurry and Taree landfills but due to their size, did not produce enough methane gas to make extraction viable. This will be reconsidered in the medium term. Closed landfills can have local impacts and need ongoing management.

### Objectives

- ✦ Ensure continuity of landfill management at the Taree Waste Management Centre landfill site
- ✦ Research and plan medium term landfill requirements and rationalise facilities if required
- ✦ Minimise odour and environmental harm from current and closed landfills
- ✦ Research alternative options to landfill in the long term.



## Actions

Table 8: Actions – Waste disposal

Recommended actions	Details	Timeframe	Funding source
<b>i. Prepare specifications for the new contract for the Taree landfill site</b>	The current contract expired in June 2019 and is proposed to be extended to 2021	Immediate/ Short term	Council waste budget* *See Focus Area 3
<b>ii. Plan Taree landfill extension to meet projected demand and licence conditions, and undertake remediation of the existing landfill</b>	Undertake required improvements by tendering for and constructing the proposed extension cell to the Taree landfill	Immediate	Council waste reserves \$4.1M - \$5.4M
<b>iii. Plan and implement remaining stages for the opening of Minimbah landfill</b>	Stages include leachate collection systems to be timed with commencement of waste disposal	Short term	Council waste reserves \$400k
<b>iv. Prepare medium and long term plan for Stroud landfill</b>	Plan to include tendering and construction of a landfill cap and rehabilitation of existing landfill	Medium term	Council waste reserves \$150K
<b>v. Undertake remediation of sections of Gloucester landfill and plan for the future of the site</b>	Meet EPA licence requirements and complete site surveys	Medium term	Council waste reserves
<b>vi. Review opportunities to capture landfill gas</b>	Help meet targets for reduced landfill emissions in partnership with the NSW EPA	Medium term	Seek funding from NSW government

## Focus Area 5 – Research and development

In the coming three year period, this strategy has a focus on implementing opportunities for reducing waste that have already been identified, eg. food organics collection from households, and improved recycling through reduced contamination. To achieve the proposed waste diversion and recycling targets, circular economy principles can provide a helpful framework<sup>17</sup>. In practice this could result in a greater focus on;

- ✦ Leasing and rental arrangements for products, for example vehicles, electronics and machinery
- ✦ Sharing resources, for example short term house rental services and car share services
- ✦ Return and repair model, for example take back services by businesses to repair products
- ✦ Reselling end-of-life materials, for example construction and demolition waste
- ✦ Recycling end-of-life materials, for example the collection and remanufacture of paper for use in newspapers.

Solutions will need to be found for smaller and more diverse waste streams, in particular non-recyclable plastics, and for influencing waste produced from non-residential sources.

Waste microfactories with the technology to operate on small sites and be located wherever waste may be stockpiled, provide a potential solution and also encourage innovation, boost Australian manufacturing and create jobs<sup>18</sup>.

Research and development is identified as an important function for all organisations involved in waste and recycling services. The starting point is to collect data in a meaningful and consistent way. This will assist with reporting, program evaluation and decision making.

## Objectives

- ✦ Improve waste data collection and management systems within Council Waste Services
- ✦ Encourage waste avoidance and innovation in the commercial and construction waste sectors
- ✦ Investigate circular economy opportunities within the region
- ✦ Work with industry, community organisations and other councils in developing local solutions to waste problems and exploring new markets for recyclable materials.

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<sup>17</sup> NSW Government, October 2018, *Too Good to Waste*, Discussion paper on a circular economy approach for NSW

<sup>18</sup> <https://newsroom.unsw.edu.au/news/science-tech/big-challenges-micro-solutions-closing-loop-australia%E2%80%99s-waste-crisis>

## Actions

Table 9: Actions – Research and development

Recommended actions	Details	Timeframe	Funding source
<b>I. Quantify Strategy outcomes to be achieved by 2030</b>	Undertake modelling of potential diversion from specific waste streams required to meet the 75% waste diversion goal	Short term	Council waste budget \$10k
<b>ii. Improve and extend Council's waste data management systems</b>	Enable access to accurate data for the whole Council area to assist in planning services and provide consistent data reporting methods	Short term	Council waste budget \$30k
<b>iii. Build knowledge of C &amp; I, and C &amp; D waste streams</b>	Improved understanding of business recycling needs and opportunities that can assist in meeting diversion targets, and encourage innovative solutions	Medium term	Seek grant funding
<b>iv. Investigate ways to improve recycling outcomes through land use planning and approval processes</b>	Evaluate waste & recycling requirements when planning and approving new developments, and improve compliance with conditions	Medium term	Internal staff resources
<b>v. Research new opportunities for locally based circular economy opportunities</b>	Opportunities include the potential for micro factories in the council area to reprocess waste materials (eg soft plastics) into useful products.	Medium to long term	BWRF \$10k Seek grant funding for identified projects
<b>vi. Research and monitor alternative waste treatment (AWT) technologies</b>	AWT technology facilities operating at a local scale could become viable in the future.	Long term	Seek grant funding

## Implementation

Detailed action plans will be developed for each key focus area for the first three years of the strategy lifespan, from July 2019 to June 2022. The action plans will include more detailed timeframes, resource allocation, responsible staff and methods of evaluation. The Waste Program Coordinator will monitor progress against the plans on a monthly basis and provide a six monthly progress report to Council. Work on actions requiring immediate attention has commenced.

The strategy will need to be reviewed and updated on an annual basis to reflect new information and changes in the external environment, in particular changes to markets for recycling, and to update the baseline data. Modelling of different options for achieving the goal of an additional 11% diversion of waste from landfill will also assist in future updates of the strategy.

It is recognised that to achieve this level of waste diversion new services will need to be offered, particularly in the areas of food waste and soft plastics collection and processing. Reduction in recycling contamination and illegal dumping and a strengthened focus on waste avoidance will be required. A concerted 'call to action' is recommended so that households, businesses, schools, council staff and visitors to the area all play their part in ensuring the success of the strategy.

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# Appendices

## Appendix 1: Policy framework for waste management

### Local government framework

The *Local Government Act 1993* requires all councils in NSW to raise a charge on domestic premises where a waste collection service is available. In addition, councils must also promote a more responsible, sustainable and integrated approach to waste management. This includes the provision of education to residents, businesses and developers, other waste management services, waste policy and law enforcement.

Local governments' responsibilities in Australia generally extend no further than mixed solid waste (MSW). Local governments have little or no regulatory control over waste generated from Commercial and Industrial (C&I) sources.

Councils cannot compel businesses to recycle or direct them to take their waste to a particular location or dispose of it in a particular way. However, as owners of the majority of landfills in Australia, councils can drive reform via their landfill pricing and waste acceptance/rejection policies.

### Midwest Waste and Resource Recovery (WARR) Strategy 2014 - 2021

The Midwest Regional WARR Strategy<sup>19</sup> aims to support member councils improve their current solid waste management services and facilities, successfully gain funding from the EPA under the "Waste Less Recycle More" initiative, and support applications for other funding opportunities.

Midwest has identified the following Key Result Areas (KRA) to help achieve these goals. They are based on those identified in the NSW WARR Strategy 2014-21. Each KRA is underpinned by continuous improvement of waste data, community education fostering behaviour change and strengthening existing and developing new, collaborative strategic partnerships with a focus on developing effective local waste management solutions.

The Key Result Areas are:

1. Avoid and reduce waste generation
2. Increase recycling
3. Divert more waste from landfill
4. Manage problem wastes better
5. Reduce litter
6. Reduce illegal dumping

### NSW Waste Avoidance and Resource Recovery (WARR) Strategy 2014 - 2021

The New South Wales State regulatory framework consists of a range of pieces of legislation, guidelines and strategies relating to waste management. The NSW Waste Avoidance and Resource Recovery Strategy (WARR) 2014- 21<sup>20</sup> provides the framework for setting priorities and direction for local government in NSW. The NSW Government's objective is to provide a clear and consistent regulatory and policy framework that minimises harm to the environment and encourages waste avoidance and keeping materials circulating within the economy.

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<sup>19</sup> <http://www.midwaste.org.au/regional-waste-strategy/>

<sup>20</sup> <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/warr-strategy>

The strategy sets the following targets for 2021–22:

- avoiding and reducing the amount of waste generated per person in NSW
- increasing recycling rates to
  - 70% for municipal solid waste
  - 70% for commercial and industrial waste
  - 80% for construction and demolition waste
- increasing waste diverted from landfill to 75%
- managing problem wastes better, establishing 86 drop-off facilities and services across NSW
- reducing litter, with 40% fewer items (compared to 2012) by 2017
- combatting illegal dumping, with 30% fewer incidents (compared to 2011) by 2017.

The NSW Government collects data and initiates programs to manage three distinct waste streams:

- municipal waste – includes household and other council waste and predominantly consists of materials such as paper, garden and kitchen waste
- construction and demolition (C&D) waste – is mostly inert materials such as timber, bricks, plaster, offcuts, concrete, rubber, steel and excavated earth
- commercial and industrial (C&I) waste – contains relatively higher proportions of metals, plastics and timber than other forms of waste.

### **New 20-year Waste Strategy for NSW**

The strategy which is being developed in partnership with Infrastructure NSW, will set a 20-year vision for reducing waste, driving sustainable recycling markets and identifying and improving the state and regional waste infrastructure network.

The plan is to create a long-term vision and roadmap for waste and resource recovery in NSW, and include:

- New long term 20-year goals for waste generation, resource recovery and landfill diversion
- New policy positions and strategic directions in relation to waste avoidance and resource recovery
- A plan for new or enhanced policies and programs to improve waste collection and distribution
- A framework for the delivery of an integrated state infrastructure network
- An alignment of policy and regulation to achieve long-term strategic objectives
- A plan to strengthen data quality and access

### **National framework**

The Commonwealth Government has limited constitutional powers to engage directly in domestic waste management issues. This responsibility rests largely with state, territory and local governments as outlined above. However, the Commonwealth Government seeks to play a strategic role in waste policy development.

On 27 April 2018, Commonwealth, State and Territory Environment Ministers and the President of the Australian Local Government Association committed to set a sustainable path for Australia's recyclable waste. Ministers agreed to work together to better manage waste including updating the *2009 National Waste Policy – Less waste, more resources* by the end of 2018. Feedback on a publicly available discussion paper will inform updates to the 2009 National Waste Policy for consideration by environment ministers in late 2018.

## Appendix 2 Description of Council waste facilities

### **Taree Waste Management Centre**

6843 The Bucketts Way, Tinonee 2430

Services provided: a licenced landfill, sorted and unsorted loads of waste, commercial waste, green waste and recyclable materials including clean fill, bricks, concrete and scrap metal, asbestos collection, a community recycling centre with a problem waste drop off point (e.g. eg paints, batteries, household chemicals), and a tip shop.

*Opening Hours:* The Landfill and Transfer Station operates seven days per week from 7am to 5pm.

The Tip Shop is open Wednesday - Sunday from 9am to 4pm.

### **Bulahdelah Waste Management Centre**

Pacific Highway, Bulahdelah, 2423

Services provided: sorted loads of waste and recyclable material including domestic trailer loads of concrete, bricks and tiles, scrap metal, problem waste (eg paints, batteries, household chemicals) and a tip shop. The landfill is now closed.

*Opening Hours:* Tuesday 1pm to 5pm; Friday 12 noon to 4pm; Sunday 10am to 2pm.

### **Gloucester Waste Management Centre**

385 Thunderbolts Way, Gloucester 2422

Services provided: licenced landfill, sorted and unsorted loads of waste and recyclable material including clean fill, bricks, concrete and scrap metal, commercial waste, asbestos collection, a Community Recycling Centre for problem waste drop off (e.g. paints, batteries, household chemicals) and a tip shop.

*Opening Hours:* Monday Closed; Tuesday - Friday 7.30am to 4pm; Saturday - Sunday 11am to 4pm.

### **Stroud Waste Management Centre**

Simmsville Road, Stroud 2425

Services provided: a licenced landfill, sorted and unsorted loads of waste and recyclable material, asbestos, problem waste drop off (e.g. paints, batteries and household chemicals) and a tip shop.

*Opening Hours:* Monday 11am to 3pm; Thursday 12 noon to 4pm; Sunday 11am to 4pm.

### **Teagardens Waste Management Centre**

Winta Road, Tea Gardens, 2324

Services provided: sorted loads of waste, green waste, recyclable material (including concrete, bricks and tiles and scrap metal), a problem waste drop off point (e.g. for paints, batteries and household chemicals) and a tip shop. The landfill is now closed.

*Opening Hours:* Monday & Wednesday 12 noon to 4pm; Tuesday, Thursday - Friday 8am to 12 noon; Saturday Closed; Sunday 12 noon to 4pm.

### **Tuncurry Waste Management Centre**

Midge Orchid Road, Tuncurry (formerly Tip Road) 2428

Services provided: sorted loads of waste, green waste and recyclable material (including concrete, brick and tiles and scrap metal), a Community Recycling Centre for problem waste drop off (e.g. for paints and household chemicals) and a tip shop. The landfill is now closed.

*Opening Hours:* The transfer station operates 7 days a week from 8am to 4pm and the Green Tip Shop operates Tuesday - Sunday 8am to 4pm.

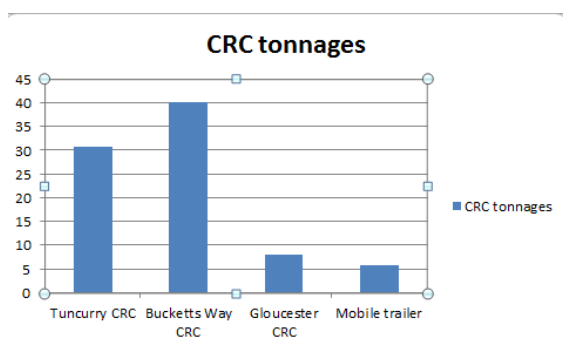


## Appendix 3 Problem waste, bulky waste, litter and dumped waste

### Problem waste

Common household problem wastes that can't be collected via council kerbside waste and recycling collection services can be taken to Community Recycling Centres (CRCs) at Tuncurry, Taree or Gloucester. Waste items collected are paints, lead acid batteries, household batteries, fluorescent tubes, gas bottles, smoke detectors and used oils. 83 tonnes in total were collected in 2017/18.

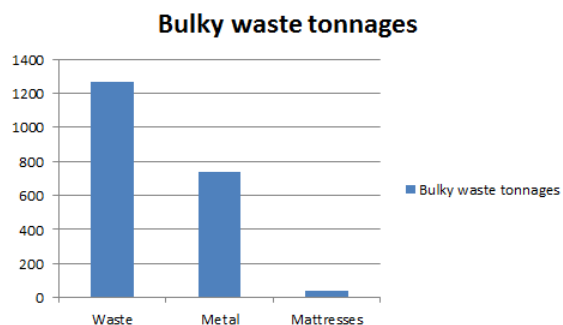
Table 10: Tonnes of problem waste collected per site



### Bulky waste

Council has continued with the bulky waste services provided to the former Great Lakes and Greater Taree Council areas, and extended the service to Gloucester. The following figures represent the tonnages and main categories of bulky waste collected in 2017/18.

Table 11: Tonnages and types of problem waste collected in 2017/18



### Litter and street sweeping and illegally dumped waste

The tonnes for litter and street sweeping in 17/18 were 1117.40. This was for all sites and sweepers.

138 tonnes of dumped waste was recorded at the Taree landfill in 2017/18 at a charge of \$20,734. This does not reflect the full cost to Council of managing illegal dumping which would also include investigation and collection costs.