The Rural City of MURRAY BRIDGE

Bridge to Opportunity

The Rural City of Murray Bridge

Waste Management Strategy

2015-2020

CONTENTS

Executive summary

The Rural City of Murray Bridge is located approximately 80 kilometres to the east of metropolitan Adelaide. The Council area covers an area of 1,832 square kilometres and includes the urban centre of Murray Bridge, the river towns of Jervois, Mypolonga, Wellington, Monteith, Woodlane and Woods Point, and the rural towns of Callington and Monarto.

The Rural City of Murray Bridge has one of the fastest growing centres in regional South Australia. As of June 2014 the area had a population of approximately 20,740 people and the town is expecting significant growth over the next 20 years. Waste management services and facilities will need to prepare and manage for this increased population growth.

Residents of the Council area are provided with several waste management services and facilities. Each household is provided with a blue domestic kerbside bin, collected weekly, a yellow recycling kerbside bin, collected fortnightly and Township properties are also provided with a green organics kerbside bin, collected fortnightly.

The RCMB also provides its residents with a transfer station and a co-located landfill at Brinkley. Council is a member of the Adelaide Hills Region Waste Management Authority (AHRWMA), which operates the Brinkley landfill on behalf of its Member Councils, and the Brinkley Transfer Station on behalf of the Rural City of Murray Bridge.

A salvage and save facility is located at the Brinkley Transfer Station, where customers are encouraged to visit the facility prior to visiting the Transfer Station to dispose of any hard waste which can be salvaged. This results in waste being diverted from landfill, meaning environmental harm is minimised, and residents in return will save on dumping fees.

This Waste Management Strategy supports the objectives and targets of the following State and National waste plans/strategies:

- Rural City of Murray Bridge Strategic Plan
- Rural City of Murray Bridge Environmental Management Plan (2013-2018)
- Zero Waste SA (ZWSA) State Waste Strategy
- Adelaide Hills Region Waste Management Authority Strategic Plan

- Environment Protection Act (1993)
- Waste to Resource Policy (2010)
- National Waste Policy (2009)

By supporting these State and National waste policies, this strategy will provide the RCMB with clear directions for the future in regards to waste management. This Strategy will also support State waste management objectives. The main objective of any action carried out by the RCMB is to reduce waste disposed to landfill, and increase recycling diversion rates.

1 Introduction

1.1 Council Profile

The Rural City of Murray Bridge is located approximately 80 kilometres to the east of metropolitan Adelaide. A key feature of the Council area is the River Murray, which divides the area in two. As a major agricultural district, the Council area supports irrigated horticulture and dairying along the River Murray and cropping and intensive animal keeping throughout the rural areas. Industry including a range of primary and secondary industries is clustered around Murray Bridge and Monarto and there is significant opportunity for the area to expand.

The town of Murray Bridge is the Regional Centre of the Murraylands Region. In addition, Murray Bridge services parts of the Adelaide Hills and Fleurieu Regions. A bustling vibrant regional centre, Murray Bridge offers a wide range of facilities and services to the local and regional community. The townships of Callington, Jervois, Monarto, Mypolonga and Wellington provide for a diversity of housing and community support services. The Monarto Zoological Park is a key tourist attraction, while water based activities and house boating on the River Murray are key attractions for locals and visitors to the area. Figure 1 illustrates the RCMB Council area.

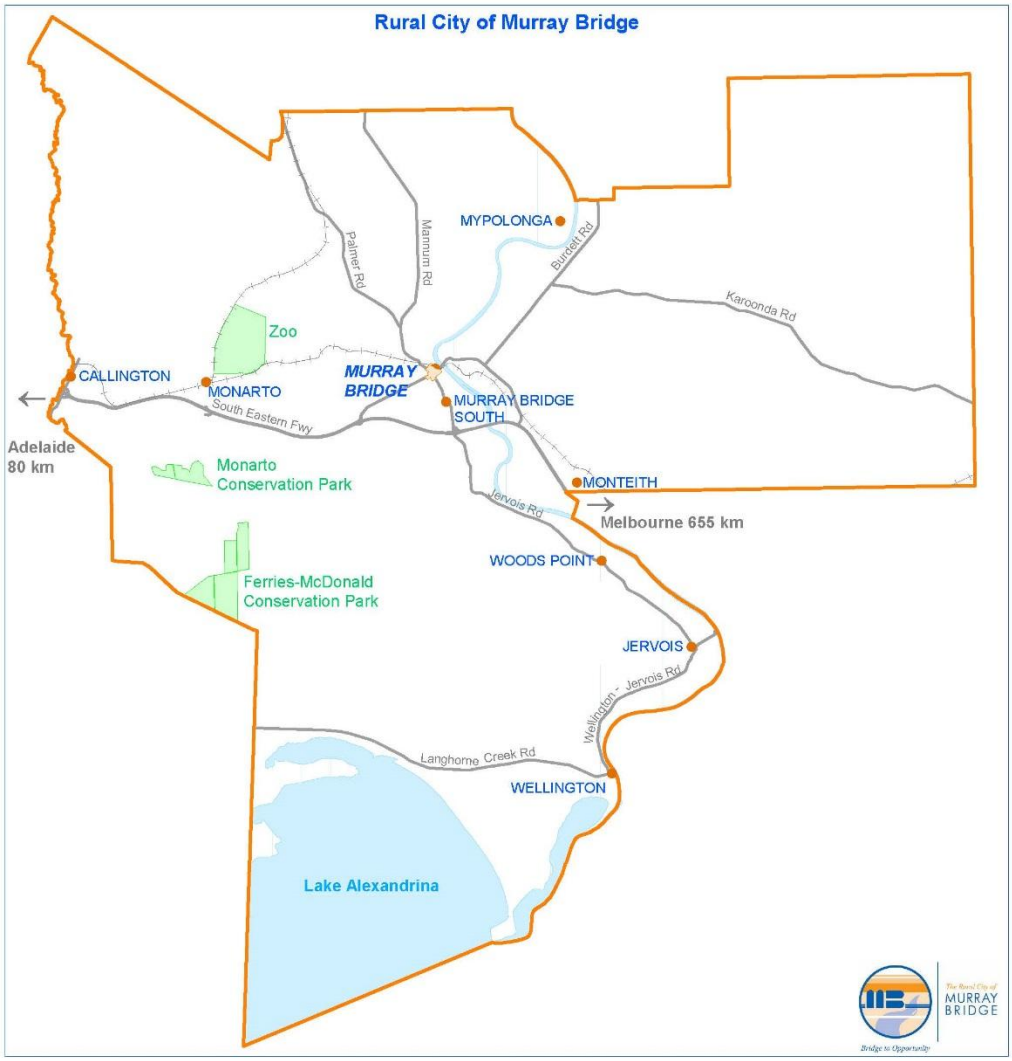


Figure 1. Murray Bridge Council Area

The Rural City of Murray Bridge is the largest Murraylands Council area with an estimated residential population at 30 June 2014 of 20,740. Economic and urban growth is expected to continue within the area, consistent with the 30 Year Plan for Greater Adelaide, identifying a target of an additional 6,000 dwellings for the Murray Bridge greater Township, which equates to an additional 13,400 persons based on an average household size of 2.4 persons per dwelling. This represents an annual average growth rate of 1.8%. Historical trends represent growth of 1.18% per annum over the last 5 years. The Murray Bridge Structure Plan adopts a relatively high growth rate of 2.3% per annum, being 1.8% as per the 30 year Greater Plan for Adelaide plus an additional 0.5%. Under this scenario Murray Bridge could effectively double its current population to around 30,000 people with an additional 8,400 dwellings. Therefore a

key consideration for Council in future years will be to prepare for and manage growth, in particular in relation to waste services.

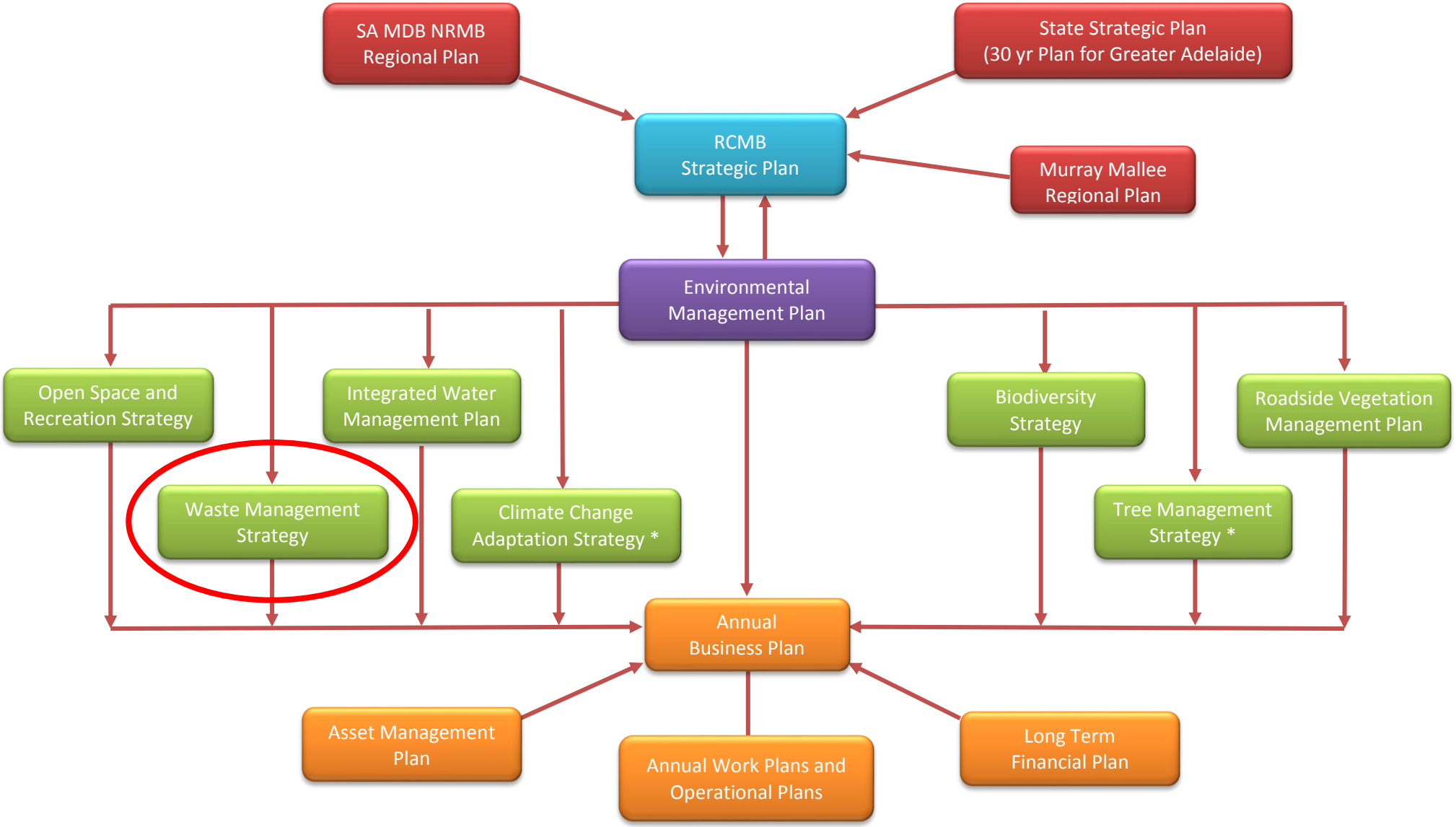
1.2 Waste Management

Council seeks to use the most effective waste management technologies and methods available while also striving to protect environmental and public health. Council's aim is to provide an environmentally sustainable waste management system consisting of:

- Strategic direction of waste management services
- Domestic and commercial waste collection
- Provision of landfills and transfer station sites and
- Education and information

The RCMB is also a member of the Adelaide Hills Region Waste Management Authority (AHRWMA) which is a subsidiary of four Councils, being the Rural City of Murray Bridge, Adelaide Hills Council, the District Council of Mount Barker and Alexandrina Council. The Authority operates the Brinkley Landfill to receive waste from its Member Councils and commercial customers in the region. In 2010 the AHRWMA also began to operate the Brinkley Transfer Station on behalf of the RCMB.

Figure 2. Linkages between key strategic documents and the Waste Management Strategy



2 Policy Context

2.1 Internal Drivers

2.1.1 The Rural City of Murray Bridge Strategic Plan

The RCMB Strategic Plan 2012-2015 outlines Council's vision as a vibrant regional centre on the river with an urban and rural heart featuring:

- A diverse and welcoming community
- Thriving tourism based on our strategic location, environment, heritage and diverse culture
- The natural beauty of our river and country landscapes
- Well planned opportunities for sustainable growth, enjoyment and quality of life and
- A great place to live, work, relax and do business

The Council's mission is to '*provide excellent governance and a range of services that will contribute to achieving long term community sustainability*'.

A goal outlined in the Strategic Plan specific to waste management is to '*minimise the environmental impact of waste*', where effective waste collection and disposal services will continue to be a high priority. Council aims to minimise the environmental impact of waste through promoting opportunities for the minimisation of waste within the community, and investigating and implementing sustainable waste management practices through key partnerships.

Linkages between the key Strategic documents and this Waste Management Strategy can be found in Figure 2.

2.1.2 The Rural City of Murray Bridge Environmental Management Plan

The RCMB Environmental Management Plan (2013-2018) recognises that waste management encompasses all activities and services that revolve around collecting, disposing and reducing waste. It outlines that Council aims to provide an environmentally sustainable waste management system whilst encouraging a reduction in waste generation to landfill and increasing the recycling of resources.

The RCMB Environmental Management Plan states that a focus of Council into the future will involve:

- Meeting Environmental Protection Authority (EPA) expectations in regards to historic landfills and Brinkley Landfill
- In conjunction with AHRWMA establish the Brinkley Transfer Station as a key resource recovery facility
- Investigate and implement options as they become available to increase to recycling and reduce waste to landfill
- Manage waste contracts effectively and investigate options to improve the efficiency of these contracts into the future
- Implement a waste policy to ensure services are being managed accordingly, with an aim to improve efficiency of those services and reduce costs to Council
- Utilise the services of AHRWMA as and when available to improve efficiencies by achieving economies of scale and collaborate regionally
- Participate in programs and obtain funding as and when available to offer residents improved and/or additional services and
- Ensure Council is compliant with the EPA's Environment Protection Waste to Resources Policy, including meeting requirements for landfill bans, when they are initiated under this policy

It is anticipated that waste management costs for Council are likely to increase into the future as a result of increasing costs for disposal due to the waste disposal levy and increasing legislative requirements.

2.2 External Drivers

2.2.1 Adelaide Hills Region Waste Management Authority Strategic Plan

The AHRWMA has developed a Strategic Plan in which its vision is *'sustainable waste management through shared services for the communities of Adelaide Hills, Alexandrina, Mount Barker and Murray Bridge'*, and its mission is:

- To meet Zero Waste SA Resource Recovery targets across the region where economically and environmentally justified
- To continue to develop and manage the Brinkley landfill as an EPA compliant model regional landfill that provides the most cost effective disposal option for Member Councils and commercial customers
- To educate the regional community on responsible waste choices that enhance and maintain their environment

Furthermore the Strategic Plan has outlined the following objectives:

- To take a leadership role in resource recovery and community education
- Responsibly develop and manage the Brinkley Landfill to be a model regional landfill meeting all legislative requirements and operating benchmarks
- Financial sustainability in waste services for Member Councils by pursuing a shared services model
- Advocate, research and promote best practice waste management and actively represent member councils in all forums
- A fully compliant Regional Subsidiary that meets the highest standards in governance, financial and human resource management

2.2.2 South Australia's Strategic Plan

South Australia's Strategic Plan 2011 (the Plan) has been outlined as South Australia's goal to action. It provides an important blueprint for the State which identifies the aspirations for future success. The comprehensive and long term vision will help ensure South Australia maintains its prosperity and sustainability well into the next decade.

The Plan is a reflection of the aspirations of communities for how to best continue to grow and prosper; how to effectively balance economic, social and environmental aspirations which improves overall wellbeing, and creates even greater opportunities.

The Plan's vision is to create a future that is shaped by choice rather than chance. A better future for South Australians can be created when the communities are kept strong and vibrant, the rich environment is protected, and sharing economic prosperity is pursued.

Three foundations have been recognised in the Plan to develop a sustainable society; the community, prosperity and the environment. These foundations are prioritised in the Plan.

In relation to the Environment, the Plan has three visions which are outlined below:

- South Australians think globally, act locally and are international leaders in addressing climate change
- We look after our environment and
- We value and protect our water resources

The Plan states that South Australia is well positioned to take positive action to ensure environmental sustainability, and in order to maintain the prosperity of the communities and industries, the state has to respond to climate change. The Plan recognises that planning ahead to adapt to climate change is important for the future wellbeing of the communities. Individuals and households have to consider their environmental footprint and make choices which will result in a sustainable future. At a local level this will require changing consumption patterns.

South Australia aims to increase competitive edge by exploring new markets for clean technology expertise in water and waste management.

The environmental goal in the Plan related to waste management is *'we aim for zero waste – recycling, reusing and reducing consumption all we can'*. Target 67 of the plan supports this goal, where South Australia will aim to reduce waste to landfill by 35% by 2020 (baseline: 2002-03).

2.2.3 Zero Waste SA Waste Strategy

Zero Waste SA (ZWSA) has developed a Waste Strategy 2011-2015 (the Strategy), which has recently undergone review. The objectives within this Strategy are as follows:

- To maximise the useful life of materials through reuse and recycling (focus on local infrastructure, economic interventions and incentives for change) and
- To avoid and reduce waste (focus on changing behaviour and influencing the choices that government, business and individuals make towards sustainable living)

A reviewed Waste Strategy 2015-2020 has been developed and is in draft form. The following three objectives have been developed for this 2015-2020 Strategy:

- A resource efficient economy where the best or full value is secured from products and materials produced, consumed and recovered across the state
- A stable and efficient market for investors through a clear policy framework providing a solid platform for investment decisions
- A culture enabling the South Australian community, businesses and institutions to continue and strengthen their role in implementing zero waste strategies and programs locally, nationally and internationally

The existing institutional arrangements underpinning the Strategy will end on 1 July 2015 when Zero Waste SA is replaced by a new organisation, Green Industries SA. Green Industries SA will take custodianship of South Australia's Waste Strategy in recognition of the important economic contribution and role provided by the waste management and resource recovery industry. Green Industries SA will commence operations from 1 July 2015. It will be responsible for many functions currently undertaken by Zero Waste SA and some new areas of endeavour. Building on the success of Zero Waste SA, Green Industries SA aims to increase South Australia's capabilities and leadership in green industries. It will oversee implementation of South Australia's Waste Strategy, recognising the important economic contribution and role of the waste management and resource recovery industry.

The State Government has developed seven strategic priorities for South Australia's future, which align with South Australia's Strategic Plan. These priorities identify where the most difference can be made to the community and to the future prosperity of the State. These priorities recognise that South Australia works best when there is a strong government working with strong business and a strong community:

- Giving our children every chance to achieve their potential in life
- Keeping our communities safe and our citizens healthy
- Building our reputation for premium food and wine
- Growing advanced manufacturing as the way for the future
- Realising the benefits of the mining boom for all
- Creating a vibrant city that energises and excites
- Keeping our high quality of life affordable for everyone

The 2015-2020 Draft SA Waste Strategy reflects the principles in the Zero Waste SA Act, namely:

- the waste management hierarchy
- ecologically sustainable development
- best practice methods and standards
- policy development through open dialogue and consultation

South Australia should be able to achieve the target of 35% reduction of waste to landfill by 2020.

The waste management hierarchy, as illustrated in Figure 2, plays an essential role in the Strategy. The hierarchy is internationally recognised as an aspirational framework for sustainability.

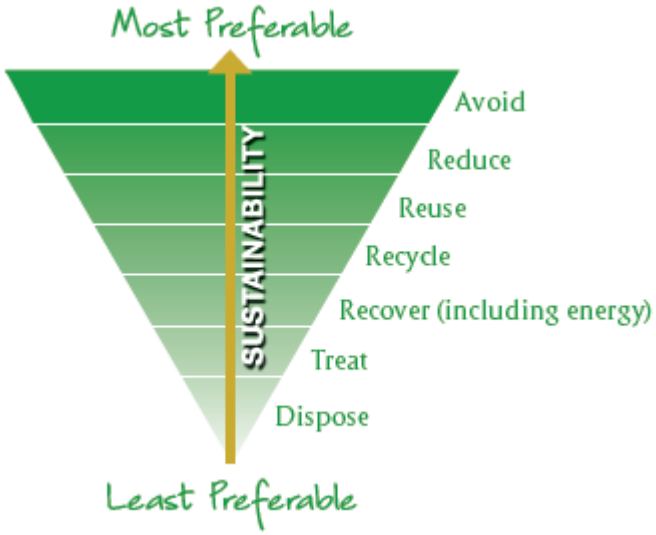


Figure 2. Waste Management Hierarchy

The hierarchy places emphasis on the need to:

- Operate at the highest possible level of the hierarchy, considering social, environmental and economic practicalities
- Make decisions for the mainstream using sound knowledge and education
- Conserve materials and energy by acting to avoid waste and reduce wasteful consumption and
- Preserve the values of materials used, through source separation and reduced contamination

The Strategy places South Australia at the higher levels of this waste hierarchy, where an emphasis is placed on sustainability and greater community engagement.

The following targets for metropolitain Adelaide have been included within the Draft SA Waste Strategy:

- **Municipal solid waste (MSW) –** divert 70% of MSW from landfill
- **Commercial and industrial (C&I)** – divert 80% of C&I waste from landfill
- **Construction and demolition (C&D)** – divert 90% of C&D waste from landfill
- The target for non-metropolitan areas is to maximise diversion to the extent practically achievable

South Australia's Strategic Plan target:

- 35% reduction in landfill disposal from 2002-03 level by 2020
- milestone of 30% by 2017– 2018

Per capita waste generation target

- 5% reduction in waste generation per capita by 2020 (from 2015 baseline)

The Draft 2015-2020 Waste Strategy outlines a number of strategies in order to meet the above targets. This Waste Strategy should be referred to when making waste management decisions.

2.2.4 Environment Protection Act 1993

The Environment Protection Act 1993 developed by the Environment Protection Authority (EPA) requires councils to take all reasonable and practicable measures to minimise or

prevent environmental harm (section 25). By providing residents with waste management services, Council ensures it complies with this obligation.

Council is also obliged by the licencing provisions within the Act to hold Environment Protection Authority licences for its current and former landfills and Waste Transfer Station. These licences contain certain condition requirements which council must comply with.

Furthermore, there is a waste disposal levy attached to each tonne of waste disposed to landfill. The levy is partially used to fund programs including waste minimisation, resource recovery and the KESAB litter strategies. The levy also supports the EPA in administering the Environment Protection Act which includes licensing, waste tracking and compliance.

The waste disposal levy for financial year 2013-14 is indicated in Table 1 along with the estimated charges for the following years. Non-metropolitan charges will apply for the RCMB.

Financial Year	Solid waste – non-metropolitan (per tonne)	Solid waste – metropolitan (per tonne)	Liquid waste (per kilolitre)
2013-14	$23.50	$47.00	$17.95
2014-15	$26.00	$52.00	$24.00
2015-16	$28.50	$57.00	$29.00
2016-17	$31.00	$62.00	$35.00

Table 1. Waste Disposal Levy Charges

The objects of the Environment Protection Act are outlined as below:

- To promote the following ecologically sustainable development principles
- That the use, development and protection of the environment should be managed in a way, and at a rate, that will enable people and communities to provide for their economic, social and physical wellbeing and for their safety while
  - Sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations and
  - Safeguarding the life-supporting capacity of air, water, land and ecosystems; and
  - Avoiding, remedying or mitigating any adverse effects of activities on the environment

- That proper weight should be given to both long term and short term economic, environmental, social and equity considerations in deciding all matters relating to environmental protection, restoration and enhancement;
- To ensure that all reasonable and practicable measures are taken to protect, restore and enhance the quality of the environment having regard to the principles of ecologically sustainable development; and
- To prevent, reduce, minimise and, where practicable, eliminate harm to the environment

The EPA defines waste as:

- Any discarded, rejected, abandoned, unwanted or surplus matter, whether or not intended for sale or for recycling, reprocessing, recovery or purification by a separate operation from that which produced the matter or
- Anything declared by regulation (after consultation under section 5A) or by an environment protection policy to be waste, whether of value or not.

2.2.5 Waste to Resources Policy 2010

The Environment Protection Waste to Resources Policy 2010 (W2R EPP) has been developed by the Environment Protection Agency and is a tool for all South Australian industry and government to better manage waste.

The W2R EPP has developed two waste management objectives:

1. Achieve sustainable waste management by applying the waste management hierarchy consistently with the principles of ecologically sustainable development.
2. In order to meet the waste management objective, waste management in this State should also –
   a) promote best practice and accountable waste management, taking into account regional difference within the State;
   b) include effective recording, monitoring and reporting systems with respect to waste transport, resource recovery and waste disposal; and
   c) promote environmental responsibility and involvement in waste avoidance, waste minimisation and waste management within the community

The W2R EPP contains several components which:

- Supports South Australia's Strategic Plan
- Provide regulatory underpinning for Zero Waste SA's Waste Strategy
- Promote the implementation of the waste management hierarchy
- Improve resource recovery and reduces waste going to landfill
- Broaden responsibility for waste management amongst stakeholders
- Provide improved options for regulating illegal dumping and inappropriate stockpiling
- Help avoid or minimise the risks of environmental harm often associated with environmental management
- Promote consistency and transparency for industry by requiring the EPA to take into account specified guidelines when assessing environmental authorisations and development applications for depots
- Create opportunities for industry sectors to work with the EPA to achieve certainty regarding expected behaviours and a more 'level played field' by developing prescribed industry codes of practice for the appropriate management of waste

The W2R EPP contains several key elements from certain dates as outlined below.

From 1 September 2010:

Landfill bans

The first of staged provisions prohibiting the disposal of certain waste types to landfill came into effect.

Illegal dumping

Improved illegal dumping and unauthorised stockpiling controls came into effect, with penalties of up to $25,000. An EPA licence is still required for the receipt and disposal of waste.

Waste transport

Risk management requirements apply for any person who transports waste (licensed or unlicensed) with penalties of up to $30,000 for non-compliance.

Listed wastes

Disposal obligations apply to unlicensed activities involving listed wastes, with penalties of up to $30,000 for non-compliance.

Medical waste

New treatment or disposal methods for medical waste may be approved by the EPA.

When waste constitutes a product

EPA standards may specify when a waste constitutes a product.

Weekly waste collection

Weekly collection of residual domestic waste is mandated for metropolitan councils.

EPA considerations

This includes when determining matters in relation to development applications or licence applications/renewals.

Waste management codes of practice

Industry specific waste management codes of practice to specify what actions will satisfy the general environmental duty may be prescribed.

From 1 September 2011

Landfill bans

The second of staged provisions prohibiting the disposal of certain waste types to landfill came into effect.

From 1 September 2012

Landfill bans

The third of staged provisions prohibiting the disposal of certain waste types to landfill came into effect.

Medical sharps

Medical sharps are banned from household kerbside bins.

Treatment of waste prior to landfill

Waste from metropolitan Adelaide (subject to exemptions) is now required to be subject to resource recovery processes prior to disposal at landfill.

From 1 September 2013

Landfill bans

The fourth and final of staged provisions prohibiting the disposal of certain waste types to landfill came into effect.

In relation to landfill bans, Table 2 details the types of wastes which have been banned as of September 2013 both Statewide and metropolitan Adelaide areas.

Hazardous waste	Lead acid batteries
Liquid waste	Medical waste
Oil	Tyres (including whole earth moving tyres)
Vehicles	Aggregated cardboard and paper
Aggregated glass packaging	Aggregated metal
Aggregated PET or HDPE plastic packaging	Aggregated vegetative matter
Aggregated PP or LDPE plastic packaging	Aggregated PVC or PS plastic packaging
Fluorescent lighting and any other lighting that contains mercury (September 2013)	Computer monitors and televisions, including components, subassemblies and consumables that are part of the equipment when discarded (September 2013)
Whitegoods	Other electrical and electronic equipment not referred to above (September 2013)

Table 2. List of wastes banned from landfill

2.2.6 National Waste Policy

The National Waste Policy 2009 sets the direction for Australia until 2020 to produce less waste for disposal and manage waste as a resource to deliver economic, environmental and social benefits. It highlights progress in relation to waste management and resource recovery and presents the drivers for change.

The National Waste Policy is based on a number of international obligations which apply to hazardous substances, wastes, persistent organic pollutants, ozone depleting substances and synthetic greenhouse gases and climate change. The international agreements are as follows: the Basel Convention; the Stockholm Convention; the Rotterdam Convention; the Vienna Convention; the Montreal Protocol; and the Kyoto Protocol. The National Waste Policy builds on the 1992 National Strategy for ecologically sustainable development commitments to improve the efficiency with which resources are used, reduce the impact on the environment of waste disposal, and improve the management of hazardous wastes, avoiding their generation and addressing clean up issues.

The Policy sets a clear direction for Australia until 2020 towards producing less waste for disposal, and managing waste as a resource to deliver economic, environmental and social benefits. The practical outcome of implementing the National Waste Policy will be that all

wastes, including hazardous wastes will be managed consistent with Australia's international obligations, and for the protection of human health and the environment.

Several aims have been stated in the policy, which are as follows:

- 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's preferred outcome is to have less waste and more resources by 2020, where it is proposed that the following will occur:

1. Australia manages waste, including hazardous waste, in an environmentally safe, scientific and sound manner, and has reduced the amount per capita of waste disposed
2. Waste streams are routinely managed as a resource to achieve better environmental, social and economic outcomes, including saving water, energy, greenhouse gas emissions and finite resources, and to increase productivity of the land
3. Australia has increased the amount of products, goods and materials that can be readily and safely used for other purposes at end of life
4. Opportunities to safely manage, reduce and recycle waste are readily available to all Australians including approaches that have been tailored to meet the needs of remote and rural communities
5. The risks associated with waste and hazardous substances are understood and managed to minimise current and intergenerational legacy issues
6. The interaction of regulatory frameworks and operational processes across government agencies aligns with world's best practice and facilitates waste avoidance, resource recovery and appropriate end of life management arrangements within their own operations as well as by business and the community
7. There are efficient and effective Australian markets for waste and recovered resources, and local technology and innovation are sought after internationally

8. Governments, industry and the community have embraced product stewardship and extended producer responsibility approaches

In order to achieve these outcomes, the Policy sets six directions and identifies 16 priority strategies that would benefit from a national or coordinated approach. These six directions are:

1. Taking responsibility – shared responsibility for reducing environmental, health and safety footprint of products and materials across the manufacture-supply-consumption chain at end of life
2. Improving the market – efficient and effective Australian markets operate for waste and 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 in order to measure progress and educate and inform the behaviour and the choices of the community

The Policy recognises that local government plays an important role in providing household waste collection and recycling services, managing and operating landfill sites, delivering education and awareness programs, and providing and maintaining litter infrastructure.

2.3 Summary of policies and frameworks

The above mentioned policies and frameworks are all somewhat interrelated and have similar goals and visions. There are a number of reasons why it is important to minimise the amount of waste being disposed to landfill. The most obvious reason is environmental; however financial benefits will also occur when less waste is disposed to landfill due to the waste disposal levy.

3 Waste Management and the Rural City of Murray Bridge

3.1 Waste generated in the Rural City of Murray Bridge

During the 2013/2014 financial year, the RCMB generated 4,010 tonnes of waste from the blue waste bins, 1,503 tonnes of recyclables from the yellow recycling bins, and 1,846 tonnes from the green organics bins as indicated in the Table 3:

Blue domestic tonnes of waste	Yellow recycling tonnes of waste	Green organics tonnes of waste
4,010	1,503	1,846
TOTAL tonnes of kerbside waste: 7,359		

Table 3. RCMB kerbside waste 2013/2014

Table 4 illustrates the types of materials collected in the yellow recycling bin in 2010-11 to 2013-2014 financial years. This information highlights that contamination has increased over the years, which is of significance and is an area to target for improvement. However these contamination rates are provided by the processor, and studies throughout other Council areas indicate that the contamination rates reported at the processor can vary from that at the kerbside. A detailed kerbside audit would need to be completed to determine kerbside contamination rates.

Material Types collected at yellow recycling bins				
	2010/2011	**2011/2012**	**2012/2013**	**2013/2014**
TOTAL collected (including contamination)	1,450	1,791	1,331	1,442
Cardboard / Paper	1,020	1,261	937	941
TOTAL GLASS	76	92	69	52
TOTAL PLASTICS	20	24	18	32
TOTAL ALUMINIUM (CANS) / Steel (Cans,tins etc)	21	25	19	24
Contamination (tonnes)	314	388	288	392
Contamination (percentage)	**21.6%**	**21.7%**	**21.6%**	**27.2%**

Table 4. RCMB kerbside waste

4 Waste Management Facilities

The RCMB has several waste management facilities available for its residents and local businesses to assist with disposing of waste in an environmentally sound manner.

4.1 Landfill

The Brinkley landfill, operated by AHRWMA receives waste from its Member Councils including the RCMB and commercial customers in the region. The facility is licensed to accept putrescible and inert wastes including intermediate soil and waste fill. The landfill only services commercial trucks, where cars and trailers can use the adjacent RCMB transfer station to dispose of their waste.

The Landfill is currently owned by the RCMB and leased to AHRWMA. There are five historical waste cells at the site, which have recently been capped, with some additional works to be completed to finalise the capping of these cells. There was one waste cell (the fire cell), which was active until a fire occurred in 2007 when the RCMB was operating the landfill utilising a private contractor, this cell has been covered with clay and monitored for a number of years. The landfill was closed between 2007 when the fire occurred, and early 2013, when the Authority re-established an active cell at the site. There is currently one active cell adjacent to the closed "fire cell", with a new cell soon to be established.

Objectives:

- To continue to be a member of the AHRWMA and process our waste streams through the Brinkley landfill in support of the long term business and financial plans of the Authority
- To contribute to the effective management and operation of the Brinkley Landfill through the Board membership and committees of the AHRWMA

Strategies:

- Contribute to the review of the AHRWMA Strategic Plan and Business Plan to ensure that the business will be professionally managed with regular review of achievement against performance expectations
- Monitor resourcing requirements and demands through the AHRWMA
- To support exploration of other regional opportunities through the AHRWMA that will benefit to member councils, such as community education
- To support research and development trials undertaken by the Authority where of benefit to member councils

4.2 Transfer Station

Next to the Brinkley landfill is a Recycling and Waste Transfer Station where cars and trailers can dispose of their waste. The Transfer Station is currently operating Monday to Saturday from 8am until 4pm, and closed on Sundays and public holidays. In order to further benefit our community a trial is being completed to open the transfer station on Sundays.

The following disposal services are available to customers:

- Household waste (small loads only – trucks up to 2 tonnes tare)
- Commercial and industrial (small loads only – trucks up to 2 tonnes tare)
- Construction and demolition (large and small loads)
- Waste fill (clean fill, large and small loads)
- Green organics (garden vegetation, large and small loads)
- Recyclables including plastics, cardboard, metals, white goods and e-waste
- Oils
- Drum muster containers

The Transfer Station is a multi-stream recycling facility, which handles items such as general waste, paper and cardboard, plastics, green garden organics, C&D materials, metals, whitegoods, oils, tyres, e-waste, gas cylinders, chemical containers and mattresses.

Furthermore, the Transfer Station offers recycled products for sale including mulch, soil and crushed rock.

Objectives:

- To maximise recovery, reuse and recycling of materials entering the Brinkley Transfer Station
- To operate the Brinkley Transfer Station in an economically viable manner
- Continue to operate the Brinkley Transfer Station as a facility for the community to bring unwanted materials for reuse, recycling and disposal, in a cost effective manner

Strategies:

- Via AHRWMA operation of the site:
    - Consider the opening times of the Transfer Station, to ensure they meet community demand
    - Regularly (at least annually) assess the gate fees to ensure they are sustainable and in line with regional fees
    - Explore regional opportunities through the AHRWMA
    - Improve the way that waste is deposited, handled and transported to landfill in order to maximise resource recovery and provide the most effective management per tonne of material

4.3 Successful Funding Projects

The Rural City of Murray Bridge was successful in winning grant funding for the upgrade of the Brinkley Transfer Station, including baling equipment, which is used for baling recyclables ready for sale, sealed roads along with recycling bays and sales areas. This upgrade has enabled more sorting of recyclables and an area for Construction and Demolition (C&D) receipt. The Rural City of Murray Bridge received funding of $105,000 from Zero Waste SA towards the upgrade of the Brinkley Transfer Station and Council also contributed 50%. This upgrade included the installation of a large shed, enabling customers and staff shelter in all weather.

The AHRWMA was successful in a bid for 50% funding of mobile crushing equipment and Zero Waste SA contributed $140,000 towards a mobile crusher. This crusher provides the ability for Councils to crush their C&D material via the AHRWMA to create a useable product. The Rural City of Murray Bridge, The Adelaide Hills Council and the District Council of Mount Barker have used this service successfully.

Objectives:

- To maximise recovery, reuse and recycling by taking advantage of funding opportunities where available

Strategies:

- To support the currently funded projects within the region and utilise these services where possible
- To apply for suitable funding projects if and when they become available

4.4 Salvage and Save

Salvage and Save is a business initiative of Finding Workable Solutions (FWS). It is an independently resourced organisation that employs disadvantaged people. The facility salvages materials for resale which would otherwise be disposed of at the transfer station. The Salvage and Save facility is adjacent to the Transfer Station and leases this site from Council,

where they sell the goods received, ranging from electrical, furniture, books and building materials.

Objectives:

- To maximise recovery, reuse and recycling by diverting hard waste from landfill

Strategies:

- To continue to support FWS where practical and possible

5 Waste Management Services

5.1 Waste and Recycling Kerbside Service Contracts

Kerbside waste in the RCMB is collected by SITA under a contract, which expires in September 2015. The kerbside recycling and green organics is collected by SOLO, under a contract, which also expires in September 2015. The Rural City of Murray Bridge is a member of the AHRWMA and shares the services of a Waste Strategy Coordinator. Via this resource the Council realises that there are possible efficiencies to be gained by joining forces with neighbouring hills Councils and tendering for a regional waste collection service. This regional tender process is currently underway and nearing completion.

Objectives:

- To provide a cost effective and efficient waste management services that focuses on reducing waste to landfill and maximising recycling

Strategies:

- Manage waste and recycling collection contracts on an ongoing basis
- Take advantage of regional opportunities for the provision of waste collection services
- Implement a Waste Management Policy in accordance with the new waste contract due to commence in October 2015

5.2 Kerbside Bin Services

Table 3 indicates the amount of waste which kerbside bins generate in the RCMB in 2013/2014. Approximately 11,195 households are provided with a 140L blue domestic and a 240L yellow recycling kerbside bin, and approximately 7,400 township households have also been provided with a 240L green organics kerbside bin. The blue domestic bin is collected weekly, and the remaining bins are collected on a fortnightly basis (alternating weeks).

A survey of community expectations for kerbside collection services in South Australia (McGregor Tan Research 2000) indicated that the community has the following expectations for kerbside collections:

- Regularly provided
- Convenient
- Consistent and
- Provided at a reasonable cost

The community has the expectation that the items placed in the recycling bin will genuinely be recycled and not disposed to landfill. They also expect best practice and environmental management in overall waste management infrastructure and services. It is likely that residents in the RCMB will have similar expectations to that of greater Adelaide.

Objectives:

- To provide a kerbside bin service that meets the communities expectation
- Provide kerbside bin services that focus on reducing waste to landfill and increasing recycling

Strategies:

- Monitor the kerbside bin service to assess and ensure the communities expectations are being met
- Stay informed of new and emerging services that increase the diversion of waste from landfill and assess and implement these services where practical

5.3 Hard Waste

Currently no hard waste collection services are provided within the Rural City of Murray Bridge. However, residents are able to dispose of scrap metal and other recyclables at the

Brinkley Transfer Station free of charge. A Salvage and Save facility is also located here where any salvageable materials can be disposed at no cost.

Objectives:

- To increase the amount of materials recovered and reused within the community instead of being sent to landfill
- To ensure the cost of waste disposal is realised and cost recovery via the producer is achieved

Strategies:

- To support and encourage reuse and recycling of hard waste within the community
- To utilise the salvage facility as a second hand furniture store and thrift shop
- Continue to review the need for a designated hard waste collection service provided by Council and determine whether the community provided facilities provide a sufficient level or service or can be further utilised
- Assist organisations/events where possible and practical, such as Clean up Australia Day, who take a leading role to help the community with waste management, on a case by case basis

5.4 Household Hazardous Waste

"*drumMUSTER*" provides Australian agricultural and veterinary chemical users with a recycling service for eligible Agvet chemical containers at the Brinkley Transfer Station.

The Brinkley Transfer Station is currently not accredited for chemical disposal. If residents wish to dispose of chemicals they are encouraged to contact ChemClear and ZWSA.

Objectives:

- To ensure residents are directed to appropriate options for Chemical disposal

Strategies:

- Provide advice to residents regarding appropriate disposal options
- Partner with Zero Waste SA or the future Green Industries to provide chemical collection days, where these initiatives are funded by State Government

5.5 E-waste

The RCMB together with the AHRWMA are providing all residents with a free drop off service for electronic (e-waste) items, as these items are banned from landfill in non-metropolitan areas as of September 2013. The program is provided under the National Product Stewardship Scheme, where transport is funded by Council and processing/recycling is undertaken at no cost to Council.

The following items are accepted at the Brinkley Transfer Station at no charge:

- Televisions
- Computer towers and monitors
- Keyboards
- Mouses
- Printers
- Scanners
- DVD/VCR players
- Backpack/data storage drives
- Other computer equipment (cords etc.)

Objectives:

- Provide E-waste recycling services to residents, either free where required via the National Product Stewardship Scheme or at cost

Strategies:

- Partner with organisations under the National Product Stewardship Scheme or consider providing a service at cost if a partner organisation is not available

6 Community Expectations

Residents of the RCMB have certain expectations of the waste management services that Council ought to provide. A survey of community expectations for kerbside collection services in South Australia (McGregor Tan Research 2000) indicated that the community has the following expectations for kerbside collections:

- Regularly provided
- Convenient
- Consistent and
- Provided at a reasonable cost

The community also has the expectation that the items placed in the recycling bin will genuinely be recycled and not disposed to landfill. They also expect best practice and environmental management in overall waste management infrastructure and services. It is likely that residents in the Adelaide Hills region will have similar expectations to that of greater Adelaide.

However, the waste services provided by Council have to be in line with not only the community expectations, but also the demand, fiscal responsibility and Council's ability to provide the services.

6.1 Community Phone Survey

A resident phone survey was recently completed by the Adelaide Hills Council. This phone survey highlighted the following;

- 78% of survey respondents did not place all food scraps into the green bin
- 66% of people without a green bin composted food scraps

The Adelaide Hills Council has an optional 'Kitchen Caddy Program' for food scraps in place and therefore is likely to have a greater uptake of food scraps being placed in the green bin.

However the survey results indicate that food scraps are currently not being placed within the green bin.

The survey also found the following regarding specific waste items:

- Junk mail – yellow bin 85%, blue bin 7%, don't know 7%
- Clean waste paper - yellow bin 85%, blue bin 8%
- Other clear glass including broken glass - blue bin (62%), yellow bin (48%)
- Steel cans (e.g. canned pet food, soup, etc.) - yellow bin 90%, blue bin 8%
- Plastic containers such as take-away food, shampoo bottles, cleaning products etc. – yellow bin 71%, blue bin 43%
- Aerosol cans – blue bin 59%, yellow bin 33%
- Food scraps, egg shells etc. – compost 54%, blue bin 31%
- Old mobile phones – don't know 40%, other 33% - take to store, Australia Post bag, keep them, give children for toys
- Car batteries - recycling depot (40%), don't know 33%
- Batteries from things like clocks, radios, cameras, smoke alarms, etc. – blue bin 60%, recycling 13%. Don't know 11%
- Paint tins – blue bin 34%, don't know 25%
- Scrap steel – 36% recycling depot, don't know 23%, dump 21%
- Motor oil – don't know 59% , recycling depot 11%
- Kitchen or other household oils – don't know 37%, blue bin 31%, other 12% (bury)
- In the situation where the public are unsure of whether something could be recycled or not through Council's collection service, 43% said that they would put it into the garbage
- 25% would check to see where it should go
- 23% said they would put the item that they were unsure of, for recycling anyway
- The main items that the public would like to be able to recycle, and think they currently are unable to do so are electrical appliances, polystyrene / styrofoam, batteries, soft plastic and light bulbs
- The main perceived influence in encouraging people to recycle was publicity about helping the environment (39%)
- Just as influential was a desire to be socially responsible (37%)
- Half of all people surveyed (49%) feel that they do not have enough information on what happened to recycled items

- The main age group that felt that they did not have enough information about what happened to recycled items were 40 to 54 year olds, with 7 out 10 people in this age group saying that they did feel that they had enough information
- The top preferred ways of getting the information about what happened to recycled items was via letter drops from the Council (54%), followed by email (23%) and the internet (20%)
- 10% mentioned articles in the local Messenger newspaper
- The main obstacle was perceived to be lack of knowledge about recycling correctly

6.2 Landfill Audit

A visual landfill audit was completed at Brinkley landfill in September 2014 which focused on the Murray Bridge waste collection trucks and the types of materials that were being disposed to the landfill via the blue kerbside bin.

Surprisingly there are still materials that can be placed in recycling bins ending up in landfill. Listed are some of the more common items found:

- Milk cartons
- Tin cans
- Steel
- Cardboard / shredded paper
- Green waste
- Plastic (shampoo bottles, yogurt containers and many more)
- E –waste

Some of the above mentioned recyclable materials found were only minimal at times but the fact remains they are still ending up in landfill and can be used again, rather than being buried forever.

The visual landfill audit identified that food scraps were being disposed to landfill. This extremely valuable resource is going to landfill which produces landfill gases. Food scraps can be recycled through the organics bins and made into composting soils used by our farmers locally and afar.

The images included below shows some of the findings when completing the visual landfill audit. The following items can be seen within these images;

- Soft plastic
- Kettle
- Rigid plastic
- Food scraps
- Milk cartons
- Refundable containers
- Paper / Cardboard



The landfill audit supported the findings of the telephone survey completed within the Adelaide Hills Council area.

Objectives:

- To determine waste streams to focus education activities and contamination rates

Strategies:

- Undertake visual waste audits at least every two years at the landfill in conjunction with AHRWMA
- Investigate the opportunity to undertake a kerbside waste audit in conjunction with Councils waste collection service provider

7 Education

Education is the key to waste minimisation. Council will have a strong focus on education into the future. Community education is essential to promote waste minimisation and providing our community and schools with education programs will benefit our aim to reduce resources going to landfill.

Choice's our householders, community groups and local businesses make can and will affect the outcome of correct waste management. Educating our entire community will further enhance and promote better waste practices. This will be reflected by reducing the tonnages destined to landfill and increase materials to be recycled into renewable materials, or simply avoid using certain materials that may end up as waste in the first place. The reduction of contamination in our recycling yellow and green lidded bins will be a great cost benefit for Council as the materials ending up in the MRFs (material recycling facilities) will be cleaner and more beneficial to the MRF with less going to landfill reducing costs.

Objectives:

- To educate our community regarding waste reduction and recycling

Strategies:

- Provide education to all community members
  - Householders / Residents
  - Community groups

- Schools
- Local Government customer service staff and Elected Members
- Support and participate in regional education opportunities

8 Conclusion and Overall Waste Management Objectives

In relation to this Waste Management Strategy for the Rural City of Murray Bridge, the below overall targets and objectives are proposed, which will promote both environmental and financial benefits. Specific objectives and strategies have been included under key waste management areas within this plan. By implementing the combined overall and specific objectives and strategies identified within this plan Council aims to reduce waste to landfill, increase recycling and reduce Council's waste disposal costs, while also reducing the impact our community has on the environment. By implementing this strategy the waste management services of Council will correspond with State and National Waste Policies, especially the waste management hierarchy with a focus on avoiding waste and regarding waste as a resource.

OVERAL TARGETS AND OBJECTIVES

- Establish the Brinkley Transfer Station as a key resource recovery facility
- Comply with the Environment Protection Act 1993
- Comply with EPA's Waste to Resources Policy, with a particular focus on landfill bans
- Investigate and implement options as they become available to increase recycling and reduce waste to landfill
- Investigate options to improve efficiency of waste contracts into the future
- Implement a waste policy to ensure services are being managed accordingly, with an aim to improve efficiency of those services and reduce cost to Council
- Utilise the services of AHRWMA as and when available to improve efficiencies by achieving economies of scale and collaborate regionally
- Participate in programs and obtain funding as and when available to offer residents improved and/or additional services
- Assist to meet ZWSA's Resource Recovery targets – reduce waste to landfill by 35% by 2020, divert 70% of municipal solid waste from landfill, divert 75% of commercial and industrial waste from landfill, and divert 90% of construction and demolition waste from landfill

- Educate the regional community on responsible waste choices that enhance and maintain their environment
- Explore new markets for clean technology in waste management
- Aim for zero waste – recycling, reusing and reducing consumption whenever possible
- Follow the principles of the waste management hierarchy with a focus on avoiding and reducing waste
- Manage waste as a resource to achieve better environmental, social and economic outcomes
- Meet community expectations