

# Local government waste plan

## City of Joondalup

### Part 1 - services and performance

#### 1.0 Introduction

Part 1 of the City of Joondalup waste plan establishes the City's waste profile and baseline information in relation to the objectives and targets set out in the Waste Avoidance and Resource Recovery Strategy 2030 (Waste Strategy):

**Avoid** - Western Australians generate less waste.

**Recover** - Western Australians recover more value and resources from waste.

**Protect** - Western Australians protect the environment by managing waste responsibly.

Where data was available, the Department of Water and Environmental Regulation (DWER) has pre-filled sections of Part 1. If any of the pre-filled information is incorrect, please amend accordingly and advise of the changes.

Please take the time to ensure that you complete each section, where relevant. In some tabs, you may need to scroll down to ensure that you have not missed any sections.

## Part 1 - Services and performance

### 2.0 Integrated planning and reporting

All local governments plan for the future<sup>1</sup> through the development of strategic community plans and corporate business plans. Waste plans form part of local government integrated planning and reporting as an issue-specific informing strategy.

Table 1: Links between plan for the future and waste management (Please complete the table, even if the answer is "waste isn't mentioned in our SCP or CBP")

Strategic Community Plan	
Title:	Joondalup 2022: Strategic Community Plan 2012-2022
Came into force:	2012
Date of next review:	Revised in 2018. A new Strategic Community Plan is currently being developed which is planned to be completed in 2022.
Waste-related priorities:	Demonstrate current best practice in environmental management for waste.
Corporate Business Plan	
Title:	Corporate Business Plan 2020/21 - 2024/25
Came into force:	2020
Date of next review:	2021 (reviewed annually)
Waste-related priorities:	Environmental resilience: identify and respond to environmental risks and vulnerabilities. Implementation of the Waste Management Plan 2016-2021 is listed as a project.
Environment Plan	
Title:	Environment Plan 2014 - 2019
Came into force:	2014
Date of next review:	A new Environment Strategy is planned to be completed in 2023.
Waste-related priorities:	To minimise waste to landfill through sustainable waste management practices which incorporate reduce, re-use, recovery and recycling principles.
Waste Management Plan	
Title:	Waste Management Plan 2016 - 2021
Came into force:	2016
Date of next review:	2021. A new Waste Management Plan is planned to be adopted by 2022.
Waste-related priorities:	<p>The aim is to guide the City's waste management practices over the next five years to ensure increased diversion from landfill and to inform future long term planning for waste management.</p> <p>Objectives include:</p> <ul style="list-style-type: none"> <li>• Minimise waste to landfill through application of the waste hierarchy.</li> <li>• Engage with the community to increase participation in sustainable waste management practices.</li> <li>• Provide a quality and cost-effective waste management service to the community.</li> <li>• Minimise the environmental impact of waste generation, collection and disposal.</li> <li>• Maintain effective relationships with key stakeholders to maximise regional outcomes.</li> <li>• Ensure the City's long term planning is informed by research and best practice.</li> </ul> <p>Targets include:</p> <ul style="list-style-type: none"> <li>• 50% of municipal solid waste to be diverted from landfill by 2015</li> <li>• 65% of municipal solid waste to be diverted from landfill by 2020.</li> </ul>

<sup>1</sup> 'Plan for the future' means a plan made under section 5.56 of the *Local Government Act 1995* and Division 1 and 3 of Part 5 of the *Local Government (Administration) Regulations 1996*.

# Part 1 - Services and performance

## 3.0 Avoid

Avoidance of waste generation is the preferred waste management option in the waste hierarchy. This section looks at waste generation rates and the reduction required to contribute to the state's waste generation reduction targets - **2025**: Reduction in MSW generation per capita by 5%, **2030**: Reduction in MSW generation per capita by 10%.

Reviewing this data is a critical element of waste planning as it can show how waste generation has changed, identify potential reasons for changes and indicate areas to target in *Part 2 – Implementation plan* (Table 21).

Table 2: City of Joondalup population, households and waste generation compared with state averages and targets for 2025 and 2030

*(Local government to review prefilled data)*

	Actual						Targets	
	2014-15 (baseline)	2015-16	2016-17	2017-18	2018-19	2019-20	2024-25	2029-30
<b>Population</b> <sup>(1)</sup>	168,920	161,050	160,260	159,470	159,977	159,806	166,118 <sup>†</sup>	170,318 <sup>†</sup>
<b>Households</b> <sup>(1)</sup>	60,329	57,518	57,236	56,954	58,726	58,999	61,659 <sup>‡</sup>	63,799 <sup>‡</sup>
<b>Total domestic waste generated</b> <sup>(2)</sup>	90,296	86,853	83,878	82,140	83,899	80,513.69		
<b>Waste generation per capita/year (kg)</b> <sup>(2)</sup>	535	539	523	515	524	504	508	481

(1) Source (except 2014-15): Western Australia Tomorrow Population Report No. 11 <https://www.dplh.wa.gov.au/information-and-services/land-supply-and-demography/western-australia-tomorrow-population-forecasts>. Population for 2014-15 from Western Australia Tomorrow Population Report No. 10. Population for intercensal years extrapolated. Households estimated using 'Average people per households' from 2016 ABS Census Quickstats.

(2) Source: Local Government Census data - domestic waste

<b>Additional comments</b> <i>(local government to insert any additional comments that may be applicable)</i>
The current reduction in waste collected by the City was due to the reduction in the bulk hard waste collected as the City introduced containerised bulk hard waste collection in October 2016. *Source: Australian Bureau of Statistics 2020, Regional Population Growth (3218.0), Australian Government, Canberra. <sup>†</sup> Source: .id (informed decisions) 2018, City of Joondalup Population Forecast, Population, <a href="http://forecast.id.com.au/joondalup">forecast.id.com.au/joondalup</a> <sup>‡</sup> Source: .id (informed decisions) 2018, City of Joondalup Population Forecast, Households, <a href="http://forecast.id.com.au/joondalup">forecast.id.com.au/joondalup</a>

# Part 1 - Services and performance

## 4.0 Recover

Where waste generation is unavoidable, efforts should be made to maintain the circulation of materials within the economy. Table 3 gives the overall recovery rate for your local government compared to Waste Strategy targets and the state average. This is broken down into the proportion of the recovery which was materials recovery (reuse, reprocessing or recycling) or energy recovery. The Waste Strategy includes a target that from **2020**, energy should only be recovered from residual waste (see *Guidance Document – Table 1*, for more information).

Table 3: City of Joondalup population, households and recovery rate compared with state averages and targets for 2020, 2025 and 2030

(LG to review the pre-filled data and amend/update if necessary. Add additional comments if necessary.)

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020 target	2025 target	2030 target
Population <sup>(1)</sup>	168,920	161,050	160,260	159,470	159,977	159,806			
Households <sup>(1)</sup>	60,329	58,226	57,500	59,181	58,726	58,999			
Overall recovery (%) <sup>(2)</sup>	49%	44%	56%	59%	59%	57%	65%	67%	70%
Materials recovery	49%	44%	56%	55%	57%	56.7%	>80%	>80%	>80%
Energy recovery	0%	0%	0%	0%	0%	0%	<20%	<20%	<20%
Perth metro average <sup>(3)</sup>	36%	38%	40%	41%	42%	not available			

(1) Source (except 2014-15): Western Australia Tomorrow Population Report No. 11 <https://www.dplh.wa.gov.au/information-and-services/land-supply-and-demography/western-australia-tomorrow-population-forecasts>. Population for 2014-15 from Western Australia Tomorrow Population Report No. 10. Population for intercensal years extrapolated. Households estimated using 'Average people per households' from 2016 ABS Census Quickstats.

(2) Source: Local Government Census data - domestic

(3) Source: Waste Authority data fact sheets <http://www.wasteauthority.wa.gov.au/programs/data/data-fact-sheets/>

### Additional comments (local government to insert any additional comments that may be applicable)

Since 2018-19 the percentage of recovery has dropped to 56.7% (for 2019-20), due to the lower percentage of materials being recovered from the bulk hard waste stream being down from 38% to approximately 25%. The City's general waste is also not being processed at the RRF due to the removal of the green waste which reduced the remaining organics in the general waste bins diversion rate. It is also due to the reduced recovery in recycling materials from the kerbside recycling due to the Cleanaway MRF fire in December 2019. This led to the City's recycling to be processed at an alternative facility (SMRC) which has only 73% recovery compared to 85% recovery at the Cleanaway MRF. The overall recovery includes the councils waste recovery percentages.

# Part 1 - Services and performance

## 5.0 Protect

Objective 3 of the Waste Strategy is to protect the environment by managing waste responsibly, with targets for achieving better practice, reducing litter and illegal dumping. **By 2030 all waste is managed by and/or disposed to better practice facilities, by 2030 move towards zero illegal dumping and zero littering.**

## 5.1 Better practice

Adoption of better practice approaches to waste management is an important way in which local government can better protect the environment from the impacts of waste, and contribute to achievement of the targets under objective 3 of the Waste Strategy. See *Guidance Document - 5.0 Better practice, Table 4* for a summary of the Waste Authority's current and planned better practice guidelines.

Table 4: Better practice approaches and programs adopted by the City of Joondalup

(LG to complete the table)

Waste management activity/service	Waste Authority better practice guideline or program	Date of adoption/implementation	Comment
The City has implemented the three bin system with a GO bin not a FOGO bin and diverts green waste from landfill.	Better bins kerbside collection guidelines 2016	Adoption January 2018, Commencement of roll out January 2019	The City completed extensive research and modeling to inform the decision of introducing the third bin as GO instead of FOGO. The City understands that the current best practice is FOGO and will continue to monitor the infrastructure and markets and consider implementation of FOGO in the future.
Bulk Hard Waste containerised in skip bins and separate collections of up to 4 white goods and 6 mattresses all in an on request system. All waste is sent for recycling with recovery of approximately 25% from skips, 75% from white goods and 80% from mattresses	N/A (Waste Authority Position Statement on Source Separation)	Adoption March 2016, Commencement of service October 2016	Previous to the introduction of this on-request service, the City was the highest generator of waste in WA for the bulk waste service. The City's decision to introduce this service has led to a reduction in total waste collected from 90,000t in 2014/15 to 80,000t in 2019/20 and contributed to an increase in recovery from 44% to 57% of waste recovered.
Other drop off events for e-waste and charity clothing held twice a year for each waste stream	N/A (Waste Authority Position Statement on Source Separation)	Council adoption June 2015 / Implementation September 2015	The City runs the e-waste and charity clothing drop off events to assist residents in responsibly disposing of their waste and ensuring the items are recovered.

## Part 1 - Services and performance

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### 5.2 Litter

The data in Table 5 was reported by the your local government in the 2017-18 local government census. Additional information to be provided by the local government in Table 6 if available.

Table 5: 2017-18 litter data (LG to review prefilled and complete the table)

	Response and comments
<b>Litter hotspot used on a regular basis for littering in 2017-18</b>	The City's contracted Litter Team have a collection schedule including the major arterial roads and the perimeter and pathways in natural areas. Litter in natural areas is also measured and reported in the annual review of the City's Environment Plan and as part of the Annual Report.
<b>What are the main items littered at these hotspots?</b>	The main litter items that are found are takeaway food bags and boxes. The amount of bottle and can items have reduced with the introduction of Containers for Change.
<b>Current measures aimed at contributing towards the zero littering target</b>	The City conducts the following measures towards the zero littering target: <ul style="list-style-type: none"> <li>• supports the community participating in Clean Up Australia Day and organises a staff clean up event</li> <li>• supports the Keep Australia Beautiful Council (KABC) Adopt a Spot program</li> <li>• has a partnership with KABC</li> <li>• installs temporary and permanent signage at littering hot spots</li> <li>• conducts a new litter campaign on public waste bins in popular coastal areas</li> <li>• developed a Short Guide to Green Events which includes tips to reduce waste and recycling at City events</li> <li>• developed a Think Green Living Guide which includes tips on disposing of litter appropriately in parks and natural areas</li> <li>• educational materials regarding littering through a variety of mediums such as website, brochures and signage in natural areas</li> <li>• contracts litter crews in natural areas and main arterial roads with a specific waste team to collect litter from hot spots</li> <li>• annually measures waste present in natural areas (items/per ha/year).</li> </ul>
<b>Estimated cost of cleanup (due to collection, disposal, education, infrastructure and enforcement)</b>	The City contracts Interlife a disability enterprise to collect litter throughout the City's main arterial roads and natural areas the costs of this includes litter collection team costs and disposal costs for 2018-19 costs were \$225,165 and 2019-20 costs were \$242,760 and education costs are not included in this. In addition the City supports local Friends Groups and Adopt a Spot groups in their clean ups by lending litter pickers and collecting and disposing of the collected litter. The Rangers usually caution litterers and rarely fine residents for littering as there is generally photo evidence required. Residents can also register as a litter reporter and provide details of witnessed litter incidents to KABC via a litter report.

Source: Local government Census data 2017-18

#### Additional comments (local government to insert any additional comments that may be applicable)

The City in general takes pride in presenting a clean and litter free environment for the use of the residents and visiting public this drives the City's

Table 6: Additional litter information (LG to complete the table where information is available)

<b>Is littering increasing or decreasing in your local government authority?</b>	Litter in natural areas is measured each year in 12 key natural areas within the City which is reported annually in the Annual Report and the Environment Plan annual review. The City has employed Intelife, a Western Australian Disability Enterprise, since August 2017 to collect litter from the perimeters and path edges of natural areas which has resulted in a reduction in litter.
<b>How were the costs associated with cleaning up litter calculated? Employee time? Dollar value? Both?</b>	The costs are calculated using the cost to engage Intelife (litter collection contractor) and also from the tipping fees for the disposal of collected litter by Intelife.
<b>Does the city have a litter strategy? If not, what is the ETA for completing one?</b>	The City has a project in the Waste Management Plan 2016-21 which targets litter collection and prevention with the objective to minimise the amount of litter within the City's parks, public open spaces and natural areas. This will also be targeted in the new implementation plan including litter in waterways. The City also as a requirement of the Environment Plan to measure the litter found in natural areas which allows for yearly comparison and then development of actions required to reduce any litter quantities.
<b>Have any of the city's compliance and waste education officers undergone training on litter prevention? If so, what training?</b>	The City's Waste Officers have not undergone training on litter prevention, however the Coordinator Waste Services has attended the illegal dumping training at WALGA.
<b>What current policies and guidelines does your council enact to prevent litter? E.g. Event planning guidelines on the use of balloons in council facilities and the release of helium balloons; no cigarettes on the beach; no single use plastics at events.</b>	The City has a requirement for construction / developments to have and use a Waste Management Plan to reduce the impacts of waste on the environment e.g. prevent littering and recycling of any salvageable material. The City has developed a Short Guide to Green Events including reference to minimising use of single use plastics at events. In November 2015, Council resolved to maintain the City's current practice and not release balloons at City organised events. The City has also developed a Think Green Living Guide which includes reference to not releasing balloons into the environment. The City of Joondalup Local Government and Public Property Local Law 2014 (last amended in 2019) states that a person must not smoke in contravention of a sign erected on a beach which prohibits the act of smoking and includes a penalty of \$50.
<b>How does your local government measure the effectiveness and impact of programs designed to reduce littering and illegal dumping?</b>	The City annually measures the litter found in natural areas using the methodology provided by WALGA for Urban Natural Area Management KPIs with an indicator of the volume of discarded foreign material per ha in high priority management areas. Three 30m x 20m transects are assessed in each of the 12 key natural areas and the number of foreign materials is averaged per hectare. The City also counts the work orders relating to litter collection in the natural area over the year since the introduction of Intelife, which has reduced as follows: <ul style="list-style-type: none"> <li>• 90 work orders in 2017</li> <li>• 70 work orders in 2018</li> <li>• 31 work orders in 2019</li> <li>• 47 work orders in 2020.</li> </ul>
<b>Which division of your organisation is responsible for litter management/prevention? Waste services? Compliance (e.g. Rangers)? Infrastructure?</b>	Litter management and prevention is the responsibility of the Waste Services Business Unit which is part of the Infrastructure Management Services Directorate. The City's Rangers received 937 complaints in regards to littering in 2019/20. Litter prevention is the responsibility of Rangers through issuing fines and warnings. The Waste Services team works with the community to support litter collection by providing pick up sticks, gloves and litter collection for any local residents and groups that run clean up events throughout the year and on Clean Up Australia Day.
<b>How important is litter management to your organisation? (1 - Not at all important; 5 - Highly important).</b>	5

## Part 1 - Services and performance

### 5.0 Protect

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### 5.3 Illegal Dumping

The data in Table 7 was reported by your local government in the 2017-18 local government census. Additional information to be provided by the local government in Table 8 if available.

Table 7: 2017-18 Illegal dumping data (LG to review prefilled data and complete the table)

		Response and Comments
Cost of cleaning up illegally dumped waste during 2017-18	\$ 50,000	The Waste Services team is responsible for cleaning up illegally dumped materials. Rangers are responsible for the reporting and enforcing of penalties. It is estimated that cleaning up illegally dumped waste costs the City approximately \$50,000 per year.
Sites used on a regular basis for illegal dumping in 2019-20. Where possible, please provide site address/es	14	Rangers issued 14 infringements and 4 cautions for illegal dumping in the City in 2019-20. The following locations were identified as being used regularly for illegal dumping in 2019/20: 3x Barwon Park, Craigie, 3x Blackfriars Road, Joondalup, 3x Broadbeach Park, Hillarys, 8x Burns Beach Road, 3x Chadstone Park, Craigie, 4x Delamere Ave, Currambine, 4x Delamere Park, Currambine, 3x Goollelal Drive, Kingsley, 3x Grand Boulevard, Joondalup, 5x Hepburn Avenue, 9x Hocking Road, Kingsley, 5x Joondalup Drive, Edgewater, 5x Oceanside Prom, Mullaloo, 3x Portwood Cross, Joondalup, 3x Regents Park, Joondalup, 4x Trappers Drive Woodvale, 5x West Coast Drive, Sorrento, 3x Whitfords Ave, Craigie.
What are the main items dumped at these sites?		Bulk junk, asbestos
Current measures aimed at contributing towards the zero illegal dumping target		City Ranger patrols are conducted dealing with observed offences and responding to littering complaints and conduct surveillance where litter and illegal dumping is ongoing. The City also runs an on-request bulk hard waste service which allows for residents to dispose of their bulk waste on demand which may lead to a reduction in illegal dumping which tends to occur when residents find they need to dispose of waste quickly

Source: Local government Census data 2017-18

Table 8: Additional illegal dumping information (LG to complete the table where data is available)

Is illegal dumping increasing or decreasing in your local government authority?	The complaints the City received about litter and illegal dumping has reduced from 1,073 complaints in 2016-17 to 937 complaints in 2019-20. Infringements given by City Rangers for litter and illegal dumping has ranged between 8 and 21 during 2016-2020 with 8 being in 2017-18.
How does your local government measure the effectiveness and impact of programs designed to reduce illegal dumping?	The City currently doesn't have any dedicated illegal dumping reduction programs however the introduction of the on request bulk hard waste and ranger patrols and infringements are measures that can effect the amount of illegally dumped waste. The amount of infringements for littering an illegal dumping is reported annually for Census
Which division of your organisation is responsible for illegal dumping management/prevention? Waste services? Compliance (e.g. Rangers)? Infrastructure?	Waste Services is responsible for the education activities to prevent and reduce illegal dumping and Rangers for enforcement and compliance.

Table 9 indicates the type of detailed data local governments may collect to enable better targeted monitoring and enforcement of illegal dumping. Please provide this information here, if available.

Table 9: Detailed illegal dumping data collection by the City of Joondalup

(LG to complete the table if data available)

Date of data collection:

2019-2020 for City land only - no tonnes recorded

Waste Type	# of incidents	Total approximate Weight (tonnes)	Change from previous year	Regulatory notices issued
C&I				
C&D				
E-waste				
Household waste	156 mattresses			
Mulch & green waste				
Scrap metal	56 white goods			
Soil & excavated material				
Hazardous/problem waste				
Other	Of the 76 regular sites that were recorded the waste type is not noted.	The tonnes are not recorded as the waste is added to the general waste bay at the WOC.	Not recorded	
<b>TOTAL</b>				
<b>Cleaned up by</b>	<b>% of total incidents</b>		<b>Cleanup costs (\$)</b>	
Local government	100%		\$50,000 in total	
Land owner	unknown			
Offender	unknown			
<b>TOTAL</b>				

# Part 1 - Services and performance

## 6.0 Waste management tools

### 6.1 Waste services

Local government data relating to the waste collected, recovered and landfilled is presented in Table 10. It is important to review this data when developing *Part 2 – Implementation Plan*, as it can:

- provide an understanding of how different systems are performing (e.g. recovery levels)
- highlight the need for any new collection systems or infrastructure
- identify the timing and capacity of any new collection systems or facilities required to meet the changing needs of local governments.

In working towards alignment with the Waste Strategy, the local government should focus on the materials resources with the greatest potential to support the objectives and targets of the Waste Strategy.

NB: DWER is currently developing a range of better practice guidelines. Better practice rates will need to be updated as the guidelines are released.

Table 10: Significant sources and generators of waste in 2019-20 (LG to reviewed pre-filled data and updated to 2019/20. Add additional comments if necessary)

Service/Sources		Tonnes collected	Tonnes recovered	Recovery rate	Better Practice rate	Target rate 2025	Target rate 2030
Kerbside	mixed waste	32,082	4,155	54%	%	55% major regional centres	60% major regional centres
	comingled recyclables	18,095	14,587				
	green waste	17,667	17,615				
	oil and car batteries	13	13				
	FOGO	-	-				
Vergeside	green waste	5,149	5,149	67%	%	67% Perth and Peel	70% Perth and Peel
	hard waste	4,991	1,597				
Drop-off	mixed waste	-	-	100%	%	67% Perth and Peel	70% Perth and Peel
	e-waste/charity clothing	51	51				
	green waste	2,460	2,460				
	hard waste	-	-				
	hazardous waste	-	-				
Public place	mixed waste	604	-	0%	%	67% Perth and Peel	70% Perth and Peel
	comingled recyclables	-	-				
Special event	mixed waste	-	-	N/A	%	67% Perth and Peel	70% Perth and Peel
	comingled recyclables	-	-				
Commercial	mixed waste	-	-	N/A	n/a	67% Perth and Peel	70% Perth and Peel
	comingled recyclables	-	-				
	paper/cardboard	-	-				
Local government waste	Illegal dumping clean up	-	-	#DIV/0!	%	67% Perth and Peel	70% Perth and Peel
	street sweepings	-	-				
	roadworks	-	-				
	other C&D activities	-	-				
	roadside pruning	-	-				
	other	-	-				
<b>TOTAL</b>		<b>81,112</b>	<b>45,627</b>	<b>56%</b>			

Source: Local Government Census Data 2017/18

#### Additional comments (local government to insert any additional comments that may be applicable)

The City undertook the compositional audit in 2017/18 before the introduction of the GO bin and has included an action in the implementation plan to carry out a series of waste compositional audits after the introduction of the GO bin and the containers for change program. This data will assist the City in planning for future waste services and infrastructure requirements.

Table 11 provides space for the local government to include bin audit information for kerbside waste services, if available. Bin audits can help local governments understand the material composition in kerbside bins, highlight where additional efforts are required to increase performance and assist in planning for future service options such as FOGO collection. **See Appendix for full breakdown of composition categories**

Table 11: Compositional audit data for kerbside waste services (Complete if data is available. Add additional comments if necessary).

General waste bin	
Yield per household (kg/hhl/week)	16.71
Per capita (kg/per capita/week)	
Audit year	2017
Composition	
	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	24.74
Organics (organics, wood/timber, textiles, earth)	69.1
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	4.27
Other (electronic waste, miscellaneous)	1.94
Recycling bin	
Yield per household (kg/hhl/week)	11.4
Per capita (kg/per capita/week)	
Audit year	2018
Composition	
	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	83.7
Organics (organics, wood/timber, textiles, earth)	15.3
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	0.26
Other (electronic waste, miscellaneous)	0.65
Garden organics or FOGO bin	
Yield per household (kg/hhl/week)	N/A
Per capita (kg/per capita/week)	
Audit year	
Composition	
	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	
Organics (organics, wood/timber, textiles, earth)	
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	
Other (electronic waste, miscellaneous)	

# Part 1 - Services and performance

## 6.0 Waste management tools

### 6.2 Waste infrastructure

The number, type, capacity and location of key existing local government owned and/or operated waste and resource recovery infrastructure is required to understand the future need for different facility types. **This section is not relevant to local governments that do not own/operate waste facilities.**

Table 12: Current waste and resource recovery infrastructure operated by the local government (LG to complete the table)

Facility name (and licence number if applicable)	Facility Type	Location	Managed by	Licence category and approved production or design capacity	Material type	Service/activity	Remaining Capacity (if applicable)	Anticipated Closure (year)
N/A								
Other								

Table 13 provides space for local governments to provide information about planned waste and resource recovery infrastructure, if relevant.

Table 13: Planned waste and resource recovery infrastructure

Location	Managed by	Licence category and approved production or design capacity (if known)	Waste type	Service/activity	Estimated operation start date

**Additional comments** (local government to insert any additional comments that may be applicable)  
 The City does not operate any waste infrastrctre however the City is one of the seven member coucils of the Mindarie Regional Council that runs the Tamala Park Tip and Recycling Center and Tip Shop.

## Part 1 - Services and performance

### 6.0 Waste management tools

#### 6.3 Policy and procurement

##### 6.3.1 Contracts

Information on your local government's existing waste contracts should be detailed in Table 14. When reviewing services, it is a good opportunity to evaluate how they are performing, opportunities for regional collaboration and to identify any opportunities for improvement, review or renegotiation.

Table 14: Existing waste management contracts (LG to complete the table)

Contractor	Services	Contract commencement	Contract expiry	Notes/comments
SUEZ	waste and recycling bin kerbside collection services	Jul-18	July 2021 with 2 x 1 year possible extension	
	greens waste bin kerbside collection	1/02/2019 (variation)	July 2021 with 2 x 1 year possible extension	The green waste kerbside collection was written into the original collection contract as a possible variation.
	kerbside greens waste processing	Feb-19	February 2022 with 2 x 1 year extensions	
Cleanaway	Bulk hard waste collection services	Sep-16	September 2019 with 2 x 1 year possible extensions	
	skip bin hard waste waste processing, white goods and mattress recycling	Sep-16	September 2019 with 2 x 1 year possible extensions	
	Kerbside Recycling processing	Dec-19	December 2022 with 2 x 1 year possible extensions	Recycling bin processing contract including, car batteries and used engine oil.
Incredible Bulk	Collection of bulk greenwaste	Jul-17	July 20 with 2 x 1 year possible extension	
Trident	supply of waste bins	Sep-18	September 2021 with 2 x 1 year possible extension	

##### 6.3.2 Waste local laws and policies

Information on your local government's existing local laws, strategies or policies that may complement/support this waste plan and contribute to the Waste Strategy objectives should be detailed in Table 15.

Table 15: Existing waste-related local laws, strategies and policies (LG to complete the table)

Type of local law, strategy or policy	Name of local law, strategy or policy	Came into force	Due for review	Comments
Waste Local Law 2017 (amended 2018)	Waste Local Law 2017	2017	2021	

## Part 1 - Services and performance

### 6.0 Waste management tools

#### 6.3 Policy and procurement

##### 6.3.3 Land use planning instruments

Information on your local government's existing local planning instruments which contribute to the management of waste should be detailed in Table 16.

Table 16: Existing waste-related land use planning instruments related to waste management (LG to complete the table)

Local Planning Strategy	TITLE:	Local Planning Strategy	NEXT REVIEW DUE:	2022
	ENDORSED BY WAPC:	1-Nov-17		
	Is waste considered and reflected in the Local Planning Strategy?	NO The Strategy doesn't consider waste however the waste and planning teams have developed a development waste plan guideline for future developments of multipul dwellings giving consideration for waste or the issue of waste collection from the new developments and infill housing.		
	Does the Local Planning Strategy identify current and future waste facility sites?	NO No as the City does not maintain or run any facilities and does not have any waste treatment sites within its boundaries		
	Does the Local Planning Strategy identify buffers around existing and/or future sites to avoid land use conflict?	NO No as there are no waste treatment facilities within the Citys boundaries		
Local Planning Scheme	TITLE:	Local Planning Scheme No. 3,	NEXT REVIEW DUE:	
	GAZETTED:	23 October 2018 updated 18 February 2020		
	Are resource recovery facilities, waste disposal facility and waste storage facility defined as land uses (as per <i>Planning and Development (Local Planning Schemes) Regulations 2015, Schedule 1, Part 6 cl. 38:</i> ) and included in the council Local Planning Scheme zoning table, with either a P/I/D/A/X permissibility?	NO The City has no waste treatment facilities within is boundaries and so no zoning is required for this land use type		
	If these land uses are not defined and not in the zoning table, how does the Scheme deal with such land uses (i.e. is an alternative definition used to that in the <i>Regulations 2015</i> ? Or are these land uses zoned as "Use not listed")?	N/A		
Does the Local Planning Scheme identify statutory buffers as Special Control Areas for strategic waste infrastructure facilities to avoid encroachment by incompatible land uses?	NO The City has no waste treatment facilities within is boundaries and so no zoning is required for this land use type			
Local planning policies	TITLE:	The Container Deposit Scheme Infrastructure Local Planning Policy	ADOPTED BY COUNCIL:	Aug-20
	RELATIONSHIP TO WASTE STRATEGY OBJECTIVES:	To provide conveniently located infrastructure to ensure the container deposit schemes' effective reduction of litter, increased recycling and protection of the environment.		
	Does the local government have any local policies which relate to the objectives of the Waste Strategy (reduce generation, increase recovery, protect the environment)?	YES This local policy will assit in protecting the environment from litter by assiting the community to take part in the Container Deposit Scheme which encourages litter collection of scheme approved containers.		

##### 6.3.4 Sustainable procurement

Local governments can be significant consumers whose purchasing decisions and procurement policies can have positive impacts. This section reviews activities relating to procurement of infrastructure, goods and services that avoid waste, promote resource recovery or encourage greater use of recyclable and recycled products. Information on existing sustainable procurement policies or practices that may contribute to the Waste Strategy objectives should be detailed in Table 17.

Table 17: Existing sustainable procurement policies and practices (LG to complete the table)

Sustainable procurement policy	Date adopted by council	Actions implemented e.g. switching to recycled printer paper	Alignment with Waste Strategy targets, objectives or focus materials
Purchasing Policy	May 2020 (CJ070-05/20)	The City will use sustainable procurement for the purchasing of goods and services and choose products with less environmental and social impacts than competing products and services and consider environmental and social impacts along with value for money outcomes when making purchasing decisions.	Aligns with reduce, recover and avoid dependent on procurment activity.

# Part 1 - Services and performance

## 6.0 Waste management tools

### 6.4 Behaviour change programs and initiatives

Communication and engagement with waste generators and managers underpins many local government waste management activities, and are vital in driving behaviour change needed to achieve the objectives and targets of the Waste Strategy.

Behaviour change programs and initiatives refers to activities that increase awareness, skills and knowledge; provide consistent messaging; help people to use waste infrastructure; and encourage the adoption of specific, positive waste behaviours and attitudes.

Most local governments have existing behaviour change programs and initiatives and it is important to evaluate their effectiveness. This section includes an opportunity for a high level qualitative assessment process to understand what has worked and what has not. The results can be used to inform actions for *Part 2 – Implementation plan (Table 21)*.

Information on the local government's existing waste behaviour change programs or initiatives should be detailed in Table 18. This may include participation in Waste Authority funded programs, or programs/initiatives run by the local government.

Table 18: Behaviour change programs and initiatives, including Waste Authority programs and other local government initiatives (LG to complete the table)

Local government program/initiative	Description	Outcomes achieved as a result of the program (Qualitative/quantitative)	Evaluation method	What's worked/not worked	Suggested improvements
SUEZ schools education program	The City contracts SUEZs waste educator to engage with primary schools within the City to run curriculum based education sessions about waste and recycling with approximately 18 sessions in schools annually.	Contact numbers through sessions and participant numbers.	Number of participants	The schools program is helpful to educate children regarding which items go into each bins. Schools are happy for this program to be run as it has a curriculum based learning program and is free for the schools.	The program could be tailored to introducing the concept of reducing waste and/or focused on the value of recycling of other items such as e-waste.
Mindarie Regional Council Education team has been made redundant so no longer provides the City's community with the following waste education or information - Earth Carers, school incursion, events education	Mindarie Regional council previously ran a waste education program for the whole region. This ceased in September 2020 and now rests with member Councils.	The outcomes were not measured through this program	There is no evaluation method used for this program however the Earth Carers program did result in educated volunteers that were valuable support for events information and new waste reduction initiatives in the community.	This program is no longer available through the MRC.	Not applicable as no longer available.
The City runs some waste education sessions / workshops for residents on the topic of composting and worm farming at home, waste minimisation and reduction.	The City's Waste Team runs waste education workshops and information sessions for residents to attend to learn about waste issues and how to reduce waste such as single use plastic.	Contact numbers through sessions and participant numbers.	Number of participants	The workshops were well attended by residents	increase education program to replace the reduction in service from the MRC in education.

**Additional comments** (local government to insert any additional comments that may be applicable)

The Mindarie Regional Council previously ran a waste education program within the City but no longer have an Education Team. The City runs other waste education programs and contracts SUEZ (waste collection contractor) to run waste education sessions in primary schools. The City is considering what gaps have been left by the MRC Education Team no longer operating, considering the limited capacity and resources the City has available to run waste education. The City is considering further its current resourcing to improve waste education for the community.

## Part 1 - Services and performance

### 6.0 Waste management tools

#### 6.5 Data

Table 19 provides an opportunity to assess existing waste data practices, identify strengths and gaps and consider the kinds of data activities which could be included in the *Part 2 – Implementation Plan* to improve the local government's waste data. It should be completed based on the data/information covered in *Part 1* of this document, as well as the individual experience of the officer/s responsible for collecting and using waste data.

Where 'no', please comment on:

- the kinds of data that is missing, where data gaps exist
- barriers to collecting or accessing adequate data
- the kinds of data collection, analysis or reporting practices that are not currently in place which would assist local government waste management functions.

Table 19: Assessment of waste data (LG to complete the table)

	YES	NO	Comment
Does the local government have access to adequate waste data to complete Part 1 of the waste plan?	yes		Yes the City collates all the data monthly that is supplied by all the contractors of the waste services the City provides. Some of the detailed data around litter and illegal dumping could be improved with respect to tonnages.
Does the local government use waste data when undertaking planning activities for waste projects/programs?	yes		Yes the City does use the waste data that has been collected and also other Councils data if they are running services the City is planning to implement and if the Councils are willing to share.
Does the local government have access to adequate waste data for this purpose?	yes		
Does the local government use waste data when monitoring or assessing waste projects/programs?	yes		
Does the local government have access to adequate waste data for this purpose?	yes		The City has used the waste data captured to assess the outcomes of the projects implemented
Does the local government use adequate waste data to measure progress toward the targets and objectives of the Waste Strategy?	yes		The City captures waste data and reports this annually through the Census to DWER. The data captured is also assessed by the City annually in the annual reporting against the <i>Waste Plan 2016-21</i> and measures this against the targets of the City's waste plan and the state waste plans objectives and targets.
Does the local government have access to adequate waste data for this purpose?	yes		
Does the local government have access to adequate waste data to fulfil annual data reporting obligations under the WARR Regulations? (previously undertaken through the Waste and Recycling Census)	yes		Yes the City captures and reports the waste data annually. The main area of data that is missing some details regarding the breakdown of the litter and illegal dumping incidents and items found by weight.
Are there any types of waste data that the local government does not currently collect or have access to that would be helpful/useful?	yes		There is a lack of data around illegal dumping and littering items found, incidents, locations, costs of removal and tonnages.
Are there any ways which local government waste data collection, storage or use could be improved?	Yes		Yes the City captures and reports the waste data annually. The main area of data that is missing some details regarding the breakdown of the litter and illegal dumping incidents and items found by weight.
Is the data collected by the local government accurate? Are any new strategies needed to improve accuracy?	yes		The data the City records is mostly from contractors and supplied from the invoicing systems so is generally accurate. The City's waste team runs checks of the data supplied to ensure it matches the invoices and actions of the contractors.
Does the pre-filled data provided in this template align with the data the local government has? i.e. is this pre-filled data accurate?		NO	The data was mostly correct but was still not complete with all the recycling and collection of waste including e-waste and charity clothing, used oil and car batteries
Any additional comments?			

## Part 1 - Services and performance

### 7.0 Summary

The purpose of *Part 1* of the waste plan is to consolidate information about current waste management practices, to enable you to assess and identify:

- current waste management performance
- alignment between current waste management practices and the Waste Strategy
- strengths and successes, as well as gaps and opportunities for improvement.

Table 20 provides space to analyse the data and information presented in Part 1, and should be used to determine waste management priorities for the short, medium and long term, and translate these priorities into actions in Part 2 – Implementation plan (Table 21).

Table 20: Assessment of current waste management performance and prioritisation of future actions *(Completing this table is optional)*

	Avoid	Recover	Protect
<b>State waste strategy objectives</b>	2025 5% Reduction in waste generation per capita	2025: Increase material recovery to 70% 2025: All local government in the Perth metropolitan region provide consistent three bin kerbside collection systems that include separation of Food Organics and Garden Organics (FOGO). From 2020: recover energy only from residual waste.	West Australians protect the environment by managing waste responsibly, 2030 move towards zero illegal dumping and zero littering
<b>Waste management achievements</b> (for example, performance/achievement against Waste Strategy targets or objectives or where particular waste management objectives have already been met)	The City's Waste Generation has reduced since the <b>2014-15</b> baseline year where the City's waste generation was <b>90,296 tonnes</b> in total or <b>535 kg/household</b> to in the <b>2019/20 period</b> where the City's waste generation was <b>80,513 tonnes</b> in total or <b>504 kg/household</b> . The City has reduced the total waste generated toward the target in the state waste strategy. The City organises waste education for community groups focusing on reducing waste such as single use plastics. The City also provides information stations at events for community awareness on the City's waste services and education on reducing waste and correct use of bins.	The City implemented a three bin system in January 2019 with a Garden Organics(GO) bin which is currently the only available option for the City's municipal waste separation. FOGO was considered, however, is not a viable option until a facility within reasonable distance can process the volume of FOGO that the City generates. The City also sends its bulk hard waste for processing and recovery with only the residual sent to landfill. The City's material recovery has improved from <b>49% in 2014-15 to 57% in 2019-20</b> , well above the Perth metro average which in 2018-19 it was 42% and trending toward the state targets.	The City runs education programs and drop off events to protect the environment from hazardous waste and help residents to not dispose of their harmful wastes in the general waste stream. Items such as household batteries, mobile phones, printer cartridges, CFL globes and e-waste can be dropped at locations around the City. The City also has an action in the current waste plan to manage litter collection and prevention.
<b>Opportunities for improvement</b> (for examples, where performance against Waste Strategy targets or objectives could be improved or where waste management objectives have not been met)	The City aims to assist the community in reducing their waste generation over the next 5 years by running education campaigns and workshops to support the behaviour change required for the long term waste reduction.	The City recovers 57% from the waste it collects currently. To achieve the 65% recovery the City will have to put in place further measures and resources in the future to achieve the state government target.	The City could improve its waste management of litter and illegal dumping by running campaigns and projects to reduce litter and illegal dumping. The litter and illegal dumping is removed usually the day it's reported and this gives less chance of the waste causing harm to the wildlife and environment.
<b>Priority areas for action in Part 2 – Implementation plan</b>	<b>Ongoing (activities currently under way and/or continuously undertaken)</b>	The City has a number of activities that are ongoing including working collaboratively with WALGA and MRC on advocacy projects. The City also has community waste behaviour programs including education on reducing waste and managing waste with the smaller 140L bin.	
	<b>Short term (within the next 1-2 years)</b>	The City's short term goals for waste include: <ul style="list-style-type: none"> <li>• gather and record better data on litter and illegal dumping tonnages.</li> <li>• investigate better practice waste collection in high density areas and multi-unit dwellings.</li> <li>• investigate options for household hazardous waste disposal.</li> <li>• further management of the City's corporate waste to reduce waste going to landfill.</li> <li>• run a household waste composition audit program routinely across different domestic services to further inform the City on possible waste diversion projects.</li> </ul>	
	<b>Medium term (within the next 3-5 years)</b>	The City's medium term goals include: <ul style="list-style-type: none"> <li>• investigate alternative waste treatment facilities and FOGO processing for future waste diversion.</li> <li>• secure long term recycling arrangements which will successfully recover high yields of materials.</li> <li>• continued review and improvement of household waste services including Waste to Energy (WtE).</li> <li>• community waste reduction initiatives including focussing on litter reduction in public places.</li> </ul>	
	<b>Long term (more than five years)</b>	Investigate WtE and service arrangements to ensure <b>only residual waste</b> is sent to landfill or WtE.	

**Part 2 - DRAFT Implementation plan (page 1)**

Table 21: Implementation plan

Waste Management Tool	Action (OR link to existing local government plan/document that details this activity)	Is this action in the City's current waste plan?	Detailed actions/sub-actions (OR link to existing local government plan/document that details this activity)	Milestones (SMART - Specific, Measurable, Achievable, Relevant, Timed)	Target (SMART)	Timeframe for delivery (completion date)	Cost of implementation incorporated into annual budget and Corporate Business Plan? Y/N - (if not, why?)	Aligns to Waste Strategy Objective/s			Responsibility for implementation (branch, team or officer title, not the names of individual officers)	Identified Risks (Impact/consequences and mitigation strategies)	City's waste management plan 2016-21 relevant current projects
								Avoid	Recover	Protect			
1 Waste services	Investigate and consider the transition from a GO bin to a FOGO bin, when or if a suitable facility within proximity to the City is available that can process the quantity of FOGO waste that the City generates at a reasonable cost.	Existing	<ol style="list-style-type: none"> <li>1. Review State Government better practice guidance on 3 bin FOGO service. Identify developments of capable infrastructure for FOGO treatment.</li> <li>2. Develop a business case and modelling, including preferred service options and specifications, performance measures and implementation plan.</li> <li>3. Go to tender for FOGO processing and apply for better bins plus funding for assistance with implementation.</li> <li>4. Roll out the service change including undertaking extensive education and information campaign.</li> <li>5. Undertake monitoring and evaluation of the contamination issues as reported by the processing contractor.</li> </ol>	<ol style="list-style-type: none"> <li>1. State governments Better Practice kerbside guidance reviewed by June 2022</li> <li>2. Business case developed by March 2024 to align with contract expiry ----- SHOULD A BUSINESS CASE SUPPORT FOGO-----</li> <li>3. Develop a comprehensive information and education program by June 2024</li> <li>4. Consider a possible 12 month trial covering 2,000 - 6,000 residents to be completed by September 2024</li> <li>5. Monitoring and evaluation of contamination as reported by the processing contractor to be completed by the end of the first year of full roll-out</li> </ol>	develop a business case that achieves a target of 80% of residents will have access to FOGO by early 2024, and decide on implementation if a FOGO processing facility that can process the City's waste capacity can be found.	Dec-25	N, But, At the time of project planning the cost of implementation will be incorporated into the annual budget and corporate business plan.	✓	✓		Finance, Waste Services, Communications and Stakeholder Management.	<p><b>Risks:</b> State Government doesn't support the waste industry to build infrastructure that is large enough to process the City's FOGO waste. Community push back on the change in the general waste collected fortnightly and FOGO collected weekly, high contamination rates of the FOGO bin, cost overruns.</p> <p><b>Mitigation:</b> Lobbying state government to assist the waste industry to increase FOGO processing capacity. At the relevant time, increase education, behavior change programs and data monitoring for pre/during/post change of services.</p>	(Project 15, continued review and improvement of household waste services) - this project is aligned with the City's current plan project objectives to improve domestic waste services following the Strategy's better practice kerbside guidelines
2 Waste infrastructure	Continue to monitor the development of waste infrastructure in the Perth Metropolitan area, including alternative waste treatment and recycling facilities and determine possible opportunities for the City	Existing	<ol style="list-style-type: none"> <li>1. Identify waste infrastructure in the area including current capacity/remaining capacity and infrastructure performance.</li> <li>2. Determine historical population and forecast population and waste projections.</li> <li>3. Identify future challenges and opportunities with current waste infrastructure.</li> <li>4. Forecast future waste infrastructure needs and undertake a needs analysis for the future.</li> </ol>	<ol style="list-style-type: none"> <li>1. Continue to monitor waste infrastructure and develop a business case by March 2024 to inform future waste infrastructure needs.</li> </ol>	Business Case developed and considered by March 2024.	Mar-24	Y		✓		Finance and Waste Services	<p><b>Risks:</b> insufficient staff knowledge/resources to undertake population forecasting and waste projections</p> <p><b>Mitigation:</b> Engage consultant as required when additional support is identified.</p>	(Project 16 Developing future waste infrastructure requirements) - This project aligns with the City's current plans project which considers the waste infrastructure that the City may need in the future.
3 Policies and procurement	Continue implementation of the procurement of goods and services protocol which takes into account the consideration where possible environmental sustainability, ecological issues and social implications.	New	<ol style="list-style-type: none"> <li>1. Continue the incorporation of recycled materials when constructing City infrastructure projects by taking an informed approach that considers whole of life costs and long term financial and environmental implications.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review the environmental weightings during the procurement process when purchasing of Goods and Services in line with the protocol.</li> </ol>	Seek to include an environmental consideration on all contracts where possible, otherwise on a case by case basis.	Ongoing	Y	✓	✓	✓	finance (contracts) and waste services	<p><b>Risks:</b> increased use of recycled or alternative material not financially viable</p> <p><b>Mitigation:</b> review on a case by case basis.</p>	This is not listed specifically in the City's current Waste Management Plan. However, this aligns with the City's current purchasing practices and policies.
4 Data	Household waste and recycling composition audit program	Existing	<ol style="list-style-type: none"> <li>1. Identify an external party that conducts waste composition audits to quantify the amounts and types of waste being generated and provide a breakdown of the different material types collected from the general waste bin, recycling bin and green waste bin.</li> <li>2. The results from the audits analysed to quantify the change in waste composition after the three bin service introduction and allow the City to plan for waste to energy and FOGO and future education.</li> </ol>	<ol style="list-style-type: none"> <li>1. Contract an external party to carry out the audits by June 2022.</li> <li>2. Set up an auditing program for the routine audit of waste streams over a rolling program.</li> <li>3. Receive and review results of the audits when undertaken.</li> <li>4. Plan waste education and future services from audit findings.</li> </ol>	Waste composition auditor to be contracted by December 2021 with results to be provided by June 2022.	Jun-22	Y	✓	✓	✓	Waste Services, Contractor	<p><b>Risks:</b> insufficient resources to undertake auditing,</p> <p><b>Mitigation:</b> Engage consultant early on with clear communication of project scope and what the City hopes to gain from the auditing. Ensure enough resources are allocated to complete the project</p>	Expanded - (Project 6 Household waste composition audit) - This project will include the green waste bin, general rubbish and recycling, provide further information for a possible FOGO service and will be carried out over more than one year.
5 Data	Improve data collection of illegal dumping	New	<ol style="list-style-type: none"> <li>1. Create a standard database for illegal dumping incidents in the City and ensure officers will use for data capture of illegal dumping</li> <li>2. Continue to monitor and seek improvement of illegal dumping services and data recording where possible.</li> <li>3. Develop an information and education campaign aimed at reducing illegal dumping.</li> </ol>	<ol style="list-style-type: none"> <li>1. Set up Illegal dumping working group to review current illegal dumping data, identify data gaps and recommend improvements by October 2021</li> <li>2. Illegal dumping working group to hold meetings with key stakeholders to refine scope of database by January 2022</li> <li>3. Implement changes required to commence improved data capture by Dec 2022</li> </ol>	Have an improved data recording system in place for illegal dumping by Dec 2022	Dec-22	Y			✓	Waste Services, Rangers, contractors	<p><b>Risks:</b> Poor stakeholder buy-in to inform development of illegal dumping database and its ongoing use.</p> <p><b>Mitigation:</b> Actively establish and manage stakeholder relationships, clearly communicate the project benefits to each stakeholder.</p>	There are no current projects in the City's plan for data collection for illegal dumping, a previous project 13 (litter collection and prevention) is for litter only.

**Part 2 - DRAFT Implementation plan (page 2)**

Waste Management Tool	Action (OR link to existing local government plan/document that details this activity)	Is the action in the City's current waste plan?	Detailed actions/sub-actions (OR link to existing local government plan/document that details this activity)	Milestones (SMART - Specific, Measurable, Achievable, Relevant, Timed)	Target (SMART)	Timeframe for delivery (completion date)	Cost of implementation incorporated into annual budget and Corporate Business Plan? Y/N - (if not, why?)	Aligns to Waste Strategy Objective/s			Responsibility for implementation (branch, team or officer title, not the names of individual officers)	Identified Risks (Impact/consequences and mitigation strategies)	City's waste management plan 2016-21 relevant current projects	
								Avoid	Recover	Protect				
6	Behaviour change programs and initiatives	Implement community waste reduction program initiative.	Existing	<ol style="list-style-type: none"> <li>1. Research waste reduction education suppliers.</li> <li>2. Review resources to enable delivery of an education program for residents to partake in to assist them in reducing the amount of waste they produce.</li> <li>3. Develop a communications plan to encourage residents to take part in the education program.</li> <li>4. Run the program with the educator.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review requirements and appropriately resource waste education by Q1 2021-22 financial year.</li> <li>2. Develop communications to encourage residents to take part in the education program by June 2022.</li> <li>3. Commence education program by January 2023.</li> <li>4. Have residents complete waste generation survey pre and post education program to measure the success and behaviour changes.</li> </ol>	Run a waste reduction education program by Jun 2023	Jun-23	Y	✓	✓	✓	Waste Services	<p><i>Risks:</i> Lack of resourcing, poor resident uptake, no behaviour change.</p> <p><i>Mitigation:</i> pro-actively promote the benefits of the education program, clearly communicate the project benefits to stakeholders, ensure the City has enough resources to complete the project.</p>	(Project 4 Community waste behaviour change program) - The City's current plan project lists this action as an objective.
7	Behaviour change programs and initiatives	Provide enhanced community education to increase awareness and encourage behaviour change around illegal dumping	New	<ol style="list-style-type: none"> <li>1. Engage with residents, body corporates and landowners near where illegal dumping is an ongoing issue.</li> <li>2. Maintain and improve partnerships with key landowners to seek cooperation in minimising and removing illegal dumping.</li> <li>3. Develop illegal dumping awareness campaign material for a range of types of offenders (e.g. renovators, builders, property owners adjoining open space).</li> <li>4. Publicise in various ways illegal dumping enforcement activities as part of the annual report.</li> </ol>	<ol style="list-style-type: none"> <li>1. Draft a communications plan regarding behaviour change for illegal dumping to be completed by September 2021</li> <li>2. Commence implementation of the communications campaign around illegal dumping.</li> <li>3. Annual waste and resource recovery performance highlighting illegal dumping communicated in Council publications (newsletters, ads) by Nov 2022</li> </ol>	30% decrease in the recorded amount of illegally dumped material from agreed baseline	Dec-23	Y	✓		✓	Waste Services, Communications and Stakeholder Management, Rangers.	<p><i>Risks:</i> Lack of stakeholder commitment, lack of behaviour change by community.</p> <p><i>Mitigation:</i> Develop robust communications plan to enlist community behaviour change, ensure clear communication of project objectives to stakeholders for greater support, ensure support from Rangers to assist in the delivering illegal dumping enforcement.</p>	The City's current plan does not have any projects that target illegal dumping reduction given its low levels of occurrence. This project is targeting education around reducing illegal dumping.
8	Behaviour change programs and initiatives	Implement a targeted litter program to reduce the volume of litter at identified hotspots in the City.	Existing	<ol style="list-style-type: none"> <li>1. Run litter audits to identify hotspots where litter is causing impact on natural areas and public places.</li> <li>2. Establish a baseline quantity and main type of litter found in the key locations.</li> <li>3. Determine main behaviour change actions required to support the project.</li> <li>4. Plan any key infrastructure changes required over the 12 months to support the project.</li> <li>5. Monitor and evaluate changes for 6 months after actions 4 &amp; 5 are complete.</li> </ol>	<ol style="list-style-type: none"> <li>1. Litter audit to be completed at at least 5 locations by December 2021</li> <li>2. Implementation plan to be developed by March 2022</li> <li>3. Infrastructure and education activities to be complete by March 2023.</li> <li>4. Project monitoring and evaluation to be completed by Dec 2024.</li> </ol>	Downward trend observed by end of Dec 2024	Dec-24	Y	✓		✓	Rangers, Waste Services, Strategic Organisational Development	<p><i>Risks:</i> Competing priorities for waste projects.</p> <p><i>Mitigation:</i> Manage expectations so that timelines established are able to be met, ensure sufficient time is allocated for delivery. Clearly communicate goals to City officers involved to further contribute to project success. Ensure enough resources are in place to complete the project</p>	(Project 13, Litter collection and prevention) -this is an existing project and the targets meet the City's current plans project objectives.
9	Managing the City's corporate waste	Review the City's corporate waste and implement reduction and recovery targets	Existing	<ol style="list-style-type: none"> <li>1. Refine the internal corporate waste data collection to identify waste generation from internal and external operations.</li> <li>2. Review the highest proportion of corporate waste generated and identify possible diversions.</li> <li>3. Determine main behaviour change actions required to support the project.</li> <li>4. Plan any key infrastructure changes as opportunity presents following the data capture.</li> <li>5. Monitor and evaluate changes and record waste reduction activities.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review the corporate waste data capture system to commence by December 2021.</li> <li>2. Identify possible waste diversions and waste reduction improvements through purchasing practices by December 2022.</li> <li>3. Implement any infrastructure and education that may be required to be completed by June 2023.</li> <li>4. Project monitoring and evaluation to be completed by Dec 2024</li> </ol>	Downward trend observed by end of Dec 2024	Dec-24	Cost of implementation incorporated into the annual budget.	✓		✓	Finance, Waste Services, Strategic Organisational Development	<p><i>Risks:</i> competing priorities, stakeholders limited participation, delays in achievement of milestones,</p> <p><i>Mitigation:</i> manage expectations so that timelines established are able to be met, ensure sufficient time is allocated for delivery, communicate City's goals to all staff and give opportunities for all staff to contribute to the goals. ensure enough resources are in place to complete the project</p>	(Project 9 Managing the City's corporate waste) - this is an existing project and the targets meet the City's current plans project objectives.