

Local government waste plan City of Kalamunda

Part 1 - services and performance 1.0 Introduction

Part 1 of the City of Kalamunda 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 future¹ 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:	Kalamunda Advancing 2027
Came into force:	2017
Date of next review:	2021
Waste-related priorities:	Priority 2: Kalamunda Clean and Green: Objective 2.3 - To reduce the amount of waste produced and increase the amount of reuse and recycling of waste
Corporate Business Plan	
Title:	Kalamunda Achieving 2019-2023
Came into force:	2019
Date of next review:	Annually
Waste-related priorities:	Strategy 2.3.1 - Develop and implement the Waste Plan 2030. Investigate and develop options for upgrading the Walliston Waste Resource Recovery Facility (WRRF) in accordance with licencing conditions.

¹ '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 Kalamunda 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	2024-25	2029-30
Population ⁽¹⁾	60,570	59,230	59,304	59,378	60,248	61,362
Households ⁽¹⁾	22,433	21,937	21,964	21,992	22,314	22,727
Total domestic waste generated ⁽²⁾	41,116	45,042	46,143	42,754		
Waste generation per capita/year (kg) ⁽²⁾	679	760	778	720	645	611

(1) Source (except 2014-15): Western Australia Tomorrow Population Report No. 11 <https://www.dph.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

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

The City of Kalamunda has conducted a thorough review of the waste census data provided to the department. The review has identified several historical data errors. The City wishes to amend data for the 2014/15 and 2016/17 reporting years (as highlighted) to ensure an accurate representation of waste generation data.

For the 2014/15 reporting year it was identified that for the 'drop off facility', construction and demolition (C&D) was an accepted waste stream. However data was not captured or reported. C&D data was captured and reported for all proceeding years. The City has averaged this data, which equates to approximately 6,000tn per annum. The City wishes to include this data within the actuals for total domestic waste generated. The revised total (35,116 + 6,000) 41,116 is within the median range of the proceeding years total domestic waste generation data.

For the 2016/17 reporting year, it was identified that a number of conversion factors were not applied to various waste streams captured within the 'drop off facility'. Since the conversion factors were not applied to data captured as cubic metre's, this significantly inflated the domestic waste generated volumes. The conversion factor was not applied to mixed waste, green waste, cardboard and C&D. The City has applied the appropriate conversion factors, as per the waste census, to the identified waste streams. A revised total domestic waste generation of 46,143 was calculated which is within the median range of previous and preceding reported years.

The City has significantly improved its data capture over the last 2 years and is very confident with the level of accuracy from 2017/18 forward.

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 Kalamunda 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	2020 target	2025 target	2030 target
Population ⁽¹⁾	60,570	59,230	59,304	59,378			
Households ⁽¹⁾	22,433	21,937	21,964	21,992			
Overall recovery (%) ⁽²⁾	27%	43%	37%	41%	45%	67%	70%
Materials recovery	27%	43%	37%	41%	45%	>80%	>80%
Energy recovery	0%	0%	0%	0%	<20%	<20%	<20%
Perth metro average ⁽³⁾	36%	38%	40%	41%			

(1) Source (except 2014-15): Western Australia Tomorrow Population Report No. 11 <https://www.dph.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)

The City of Kalamunda, in partnership with the EMRC and Cleanaway, are reviewing options to significantly increase the recovery and recycling rates of general waste skips provided to local residents (Verge Side Recovery). Currently no recycling/recovery options are available for general waste skip bins, significantly reducing the City's recovery rates and targets. Targets for 2020 reflect incremental improvements in existing processes, whereas 2025 and beyond targets reflect implementation of new processes including food organics and garden organics (FOGO) & Waste to Energy. The City understands that it's contracted waste to energy plant, which will take all waste from general waste kerbside collection previously destined for landfill, is due for commissioning in Jan 2023. This is when a significant amount of Energy Recovery occurs, however the City questions the DWER proposal that the <20% target is used for 2020, 2025 and 2030 because of the step change in energy recovery in 2023. Thus 2020 Energy recovery should be 0%

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 Kalamunda (L.G. to complete the table)

Waste management activity/service	Waste Authority better practice guideline or program	Date of adoption/ implementation	Comment
Kerbside Waste Services	Better Bins kerbside collection guidelines 2016	The City aims to roll-out the FOGO service by 2025.	The City has obtained funding through the better bins program.
Kerbside Waste Services (FOGO)	Better Bins kerbside collection guidelines	latest adoption date 2025	
Behaviour Change Programs & Initiatives	Waste Sorted Communications Toolkit	2025	To implemented after FOGO roll out.

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 (L.G. to review profiled and complete the table)

	Response and comments
Litter hotspot used on a regular basis for littering in 17-18	All major reserves and arterial roads are monitored. Litter hot spots -20
What are the main items littered at these hotspots?	General rubbish, Wrappers, soft plastics, aluminium cans, plastic and glass bottles, clothes and packaging
Current measures aimed at contributing towards the zero littering target	Received funding through Keep Australia Beautiful Council's Community Litter Grant Scheme to collect rubbish and litter dumped along the iconic Zig Zag trail with interactive signs that display the amount of litter collected and its related environmental, social and economic impacts. Keep Australia Beautiful Adopt A Spot Program. Clean up Australia Day and public advertising. Waste and Recycling Guide.
Estimated cost of clean-up (due to collection, disposal, education, infrastructure and enforcement)	\$ # #

Source: Local government Census data 2017-18

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

The City currently has three litter and illegal dumping collection officers. They are broken up into two teams. One team member is responsible for servicing all significant parks and reserves. This equates to ~40 reserves and hotspots per week. The other team, comprising of two team members, are responsible for illegal dumping collection and monitoring and litter collection from arterial roads. The team actively monitors ~60 illegal dumping sites, consisting of 20 immediate hotspots. In addition to the normal scheduling the team is also responsible for completing customer service requests (ICs).

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 (L.G. to review profiled data and complete the table)

	Response and Comments
Cost of cleaning up illegally dumped waste during 2017-18	\$ 450,907 The total budget allocation is used a cost reference.
Sites used on a regular basis for illegal dumping in 2017-18. Where possible, please provide site address/es	-20 However up to ~50-60 spots will be checked over a one month period. (Please see attachments)
What are the main items dumped at these sites?	Typically household items - Furniture, mattresses and tyres. Additional items include gas bottles, paints, general litter, metal, green waste and asbestos
Current measures aimed at contributing towards the zero illegal dumping target	With the City now accurately recording the quantity of wastes generated from illegal dumping sites, we are establishing a baseline to ensure future campaigns and initiatives have measured results.

Source: Local government Census data 2017-18

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

The City of Kalamunda is comprised of both rural, peri-urban and urban areas. Evidence has revealed that peri-urban and urban areas have had both domestic and commercial sources targeting these locations to illegally dispose of waste given their relative ease to undertake illegal dumping unnoticed

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 Kalamunda (L.G. to complete the table if data available)

Date of data collection: **FY 2018/19**

Waste Type	# of incidents	Total approximate Weight (tonnes)	Change from previous year	Regulatory notices issued
C&D				
Cr&D	conversion factor 1.4	36.62		
E-waste	e-waste conversion (12.5kg)	1.23		
Household waste	Mixed waste	201.71		
Mulch & green waste	Unprocessed green waste	6.12		
Scrap metal	Scrap metal and white goods	60		
Soil & excavated material				
Hazardous/industrial waste	Paint and Oil	0.23		
Other	Gas cylinders (52 x 5kg)	0.26		
TOTAL				
Cleaned up by	% of total incidents	Clean-up costs (\$)		
Local government	Large illegal dumpings. This cost is associated with using a contractor to clean, remove and dispose of commercial quantities of waste within City boundaries.	\$59806 ex GST		
Land owner				
Offender				
TOTAL				

Table 6: Additional litter information (L.G. to complete the table where information is available)

Is littering increasing or decreasing in your local government authority?	Increasing
How were the costs associated with cleaning up litter calculated? Employee time? Dollar value? Both?	\$676,746 (2019/20) Both. Litter and illegal dumping have its own budget code WM02. The total budget allocation is used a cost reference.
Does the city have a litter strategy? If not, what is the ETA for completing one?	As per implementation Plan
Have any of the city's compliance and waste education officers undergone training on litter prevention? If so, what training?	As per implementation Plan
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.	The adoption of guidelines and initiatives from Keep Australia Beautiful (KAB). Funding from KABC has allowed direct action and messaging to the local community and the City's webpage advises how residents can participate by "adopting a spot" and reporting illegally dumped waste.
How does your local government measure the effectiveness and impact of programs designed to reduce littering and illegal dumping?	The City has assigned a 25cubic metre hook lift bin that all illegal dumping and litter is disposed in, after collection by City officers. This allows the City to obtain accurate weight and disposal cost figures. Additionally, Waste Services officers complete itemised lists and counts of larger illegal dumpings and waste streams removed e.g. tyres, whitegoods, furniture, gas bottles etc. The City also monitors volumes and costs of the City's contractor responsible for removing and disposing of larger and/or commercial illegal dumping items. These volumes and costs are compared each financial year (FY). The City has been limited in terms of overall educational programs and enforcement options.
Which division/unit/section of your organisation is responsible for litter management/prevention? Waste services? Compliance (e.g. Rangers)? Infrastructure?	Waste Services
How important is litter management to your organisation? (1 - Not at all important; 5 - Highly important).	5

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

Is illegal dumping increasing or decreasing in your local government authority?	Increasing moderately
How does your local government measure the effectiveness and impact of programs designed to reduce illegal dumping?	The City has assigned a 25cubic metre hooklift bin that all illegal dumping and litter is disposed off once collected by City officers. This allows the City to obtain accurate weight and disposal cost figures. Additionally Waste Services officers complete itemised audits of larger illegal dumpings and waste removed e.g. tyres, whitegoods and furniture. The City also monitors volumes and costs collected by the City's contractor. These volumes and costs are compared each FY. The City has previously worked with DVER in installing covert cameras to catch and prosecute offenders in terms of educational programs and enforcement options the City has been limited. The City also monitors the number of customer service requests (ICs) generated each year.
Which division/unit/section of your organization is responsible for illegal dumping management/prevention? Waste services? Compliance (e.g. Rangers)? Infrastructure?	Waste Services

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 2017-18 (LG to review pre-filled data and amend/update if necessary. 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	18,986	-			
	comingled recyclables	5,162	4,439	18%	%	
	green waste	-	-			
	FOGO	-	-			
Vergeside	green waste	1,887	1,887	44%	%	
	hard waste	2,443	-			
Drop-off	mixed waste	2,936	-			
	dry recyclables	6,866	6,866	79%	%	55% major regional centres
	green waste	4,300	4,300			60% major regional centres
	hard waste	5	5			
Public place	mixed waste	169	-	0%		
	comingled recyclables	-	-			67% Perth and Peel
Special event	mixed waste	-	-	#DIV/0!	%	
	comingled recyclables	-	-			70% Perth and Peel
Commercial	mixed waste	-	-			
	comingled recyclables	-	-	#DIV/0!	n/a	
Local government waste	paper/cardboard	-	-			
	Illegal dumping clean up	-	-			
	street sweepings	-	-			
	roadworks	-	-	#DIV/0!	%	
	other C&D activities	-	-			
TOTAL	42,756	17,499	41%			

Source: Local Government Census Data 2017/18

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

The City's aim is to conduct bin tagging and audit programs, specifically for the potential FOGO roll out. Please refer to P2 Implementation plan.

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/hh/week)	N/A
Per capita (kg/per capita/week)	N/A
Audit year	N/A
Composition	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	N/A
Organics (organics, wood/timber, textiles, earth)	N/A
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	N/A
Other (electronic waste, miscellaneous)	N/A

Recycling bin	
Yield per household (kg/hh/week)	N/A
Per capita (kg/per capita/week)	N/A
Audit year	N/A
Composition	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	N/A
Organics (organics, wood/timber, textiles, earth)	N/A
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	N/A
Other (electronic waste, miscellaneous)	N/A

Garden organics or FOGO bin	
Yield per household (kg/hh/week)	N/A
Per capita (kg/per capita/week)	N/A
Audit year	N/A
Composition	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	N/A
Organics (organics, wood/timber, textiles, earth)	N/A
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	N/A
Other (electronic waste, miscellaneous)	N/A

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)
Walliston, Waste Resource Recovery Facility (WRRF)	Transfer Station	155 Lawnbrook Rd, Walliston	City of Kalamunda	Awaiting DWER Classification	Green Waste	Drop-off Facility	100%	2050+
					General Waste	Drop-off Facility		
					Metals	Drop-off Facility		
					Tyres	Drop-off Facility		
					Motor Oil	Drop-off Facility		
					Whitegoods	Drop-off Facility		
					E-waste	Drop-off Facility		
					Cardboard	Drop-off Facility		
					Batteries	Drop-off Facility		
					Fluorescent Tubes/Globes	Drop-off Facility		
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 (LG to complete the table)

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

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

The City is awaiting DWER classification for its Walliston RRF and is currently reviewing a number of site conditons.

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	Notes/comments
Cleanaway Pty Ltd	Household General Waste collection Household Recycling Collection Drop Bin Service (Green and General waste) Recycling processing MRF	Cleanaway have performed well and have met all relevant KPIs as per their contract.
Western Tree Recyclers	Green waste processing	Western Tree have performed well and have met all relevant KPIs as per their contract.
West Bin	Removal/haulage of our binfilled waste (generated/stored at Walliston WRRF) for recovery and disposal at their facilities.	West Bin have consistently performed well providing a recovery rate (processed & diverted from landfill) of over 90% of wastes collected for disposal.
Instant Waste	Haulage of hook-lift skips (containing specific waste types) to designated/approved facilities	Contract term expired at the end of FEB 20. The City is presently utilising Instant Waste on an adhoc basis and undertaking a contract performance evaluation. An RFT will be issued and new contract commencement will coincide with the onset of the 2020/2021 financial year.
Kala Bob Cats	Illegal dumping removal	Kala Bob Cats have performed well and have met all relevant KPIs as per their contract.

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	Comments
Development of Waste Local Law			Refer to PT2 Implementation Plan.
Development of Local Environment Strategy	Kalamunda Green and Green		Refer to PT2 Implementation Plan.

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 2010
	ENDORSED BY WARD:	Yes
	NEXT REVIEW DUE:	2020
	Is waste considered and reflected in the Local Planning Strategy?	NO Please provide details below: Waste can be considered in future reviews.
Local Planning Scheme	TITLE:	Local Planning Scheme No 3
	GAZETTED:	22-Mar-07
	NEXT REVIEW DUE:	1-Jul-20
Are resource recovery facilities, waste disposal facility and waste storage facility defined as land uses (as per Planning and Development (Local Planning Schemes) Regulations 2015) and included in the council Local Planning Scheme zoning table, with either a P/D/A/X permissibility?	YES If NO please provide comments below. Amendment 68 29/01/2016: Resource Recovery Centre' in alphabetical order in the 'Use Classes' column of Table One - Zoning Table of the Scheme and classify 'Resource Recovery Centre' as a 'U' use in the 'General Industry zone and as an 'X' use in all other zones. Inserting the land use definition for 'resource recovery centre' in alphabetical order in the 'Land Use Definitions' section of Schedule 1 of the Scheme	
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 Regulations 2015? Or are these land uses zoned as "Use not listed")?	Please provide details below:	
Does the Local Planning Scheme identify statutory buffers as Special Control Areas for strategic waste infrastructure facilities to avoid encroachments by incompatible land uses?	YES The Scheme does provide for Special Control Areas, but not for buffers associated with waste infrastructure facilities	
Local planning policies	TITLE:	LOPP 9 Dual Density Design
	ADOPTED BY COUNCIL:	Nov-17
RELATIONSHIP TO WASTE STRATEGY OBJECTIVES:	Sustainability initiatives	
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 - Refer to above LPP	
Other	TITLE: The Environmental Land Use Planning Strategy	
	ADOPTED BY COUNCIL: 23 JUL 19	
RELATIONSHIP TO WASTE STRATEGY OBJECTIVES:	The Environmental Land Use Planning Strategy Action 1.1.1 addresses reducing waste internally through online processes.	

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 or practice	Date adopted by council	Actions implemented e.g. switching to recycled	Alignment with Waste Strategy targets, objectives or focus materials
N/A	N/A	N/A	N/A

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

The City, utilising the WAGGA template, is to develop a sustainable procurement policy relating to provision of goods and services that avoid waste generation and encourage greater use of recyclable and recycled products (circular economy). Please refer to Part 2 (Implementation Plan).

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
Better Bins Funding (FOGO)	The City has applied for better bins funding (3rd Bin roll-out), through the Waste Authority.	Successful	City has received funding allocation from Waste Authority		Better Bins funding rules and timing reflect the pragmatic issues of timing of FOGO
Waste Sorted Tool Kit	The City has agreed with other LGs to utilise the waste sorted tool kit for consistent messaging.	Consistent messaging utilised in all waste communications by the City.	Used by all LGs	All local governments using the waste sorted tool kit.	
Garage Trail Sale	The City is a 3-year signatory of the Garage Trail Sale (2018-2020).	Promotion of waste hierarchy to residents and community encouragement			
Waste Education	Annual Waste and Recycling Calendar	Local Residents advised and educated on waste collections, classifications and initiatives.	Waste services operating as expected and resident feedback.	Ongoing evaluation	actioned for the following year.

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

--

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)

	Please ✓		Comment
	YES	NO	
Does the local government have access to adequate waste data to complete Part 1 of the waste plan?	✓		The City has prioritised data capture of all waste streams over the past 2.5 years and has made considerable progress in this space, however recognises improvements in some areas can be made.
Does the local government use waste data when undertaking planning activities for waste projects/programs?	✓		Waste data used to evaluate the type, amount and frequency of wastes accepted at the Walliston WRRF and its utilisation by local and non-local residents. Findings resulted in the implementation of the Entry Pass system. This data is used to facilitate behaviour change amongst residents by developing communication plans with corporate communications.
Does the local government have access to adequate waste data for this purpose?	✓		
Does the local government use waste data when monitoring or assessing waste projects/programs?	✓		Waste data capture is intrinsic to the successful operation of the Walliston WRRF, to ensure assets are correctly utilized and serviced and that ongoing waste processes (green waste shredding, fridge degassing, CAD removal etc) are orchestrated for safe and successful completion. The data is also useful in assessing future waste service considerations such as FOGO and CDS.
Does the local government have access to adequate waste data for this purpose?	✓		
Does the local government use adequate waste data to measure progress toward the targets and objectives of the Waste Strategy?	✓		The City records the amount of illegally dumped waste recovered and is in the process of ensuring the type and description is also recorded. Waste data obtained at Walliston WRRF necessitated in the provision of a dedicated receptacle for wood waste.
Does the local government have access to adequate waste data for this purpose?	✓		
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)	✓		Internal data capture and 3rd party contractual provision ensures all wastes collected (kerbside, verge collection (skip bin provision), Walliston WRRF, illegal dumping) are correctly characterised and recorded.
Are there any types of waste data that the local government does not currently collect or have access to that would be helpful/useful?	✓		Waste types collected in MSW verge side skip bins (provided by our contractor Cleanaway) is not recorded/audited. The council aims to audit this in the future as it undertakes assess future recovery options with its contractor, Cleanaway.
Are there any ways which local government waste data collection, storage or use could be improved?	✓		Audit on the amount and type of litter found/collected on the roadside(s) to Walliston WRRF
Is the data collected by the local government accurate? Are any new strategies needed to improve accuracy?	✓		Future consideration of mobile weighbridge at the Walliston WRRF and waste data capture software. The City is to assess what technologies and software is available in the market.
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?		✓	Appears to be abrogation in 16/17 data and however extended years have improved due to the City improving data capture methodology
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)*

<p>Waste management achievements (for example, performance/achievement against Waste Strategy targets or objectives or where particular waste management objectives have already been met)</p>	<ul style="list-style-type: none"> • Introduction of an entry pass system at Walliston WRRF • Introduction of a commercial vehicle permit system at Walliston WRRF • Keep Australia Beautiful initiatives and grant allocation • Engaging and collaborating with our 3rd party contractors to receive desired waste type and quantity data to meet our and Strategy target objectives • Capturing the specific quantity of illegally deposited wastes
<p>Opportunities for improvement (for examples, where performance against Waste Strategy targets or objectives could be improved or where waste management objectives have not been met)</p>	<ul style="list-style-type: none"> • Improve verge side recycling/recovery rates • Further increase data capture and analysis of illegal dumping and litter occurring within the City of Kalamunda • Develop and implement behavioural change programs and programs targeting waste education, litter and illegal dumping • Development of robust polices and local laws • Undertake an internal waste questionnaire requiring the participation of all City employees, explaining the aims and objectives of the Waste Strategy and how we, as a team, can provide a positive contribution
<p>Priority areas for action in Part 2 – Implementation plan</p>	<p>Ongoing (activities currently under way and/or continuously undertaken) Development of Waste Plan, data capture and analysis.</p>
	<p>Short term (within the next 1-2 years) License of WTS including potential facility improvements, employment of Waste Education Officer, Development of Waste Plan, CDS education for school, sporting clubs and community groups, development of Waste Local Law, Collection and processing Tender for City Waste Collection, Litter and illegal dumping guidelines. Bin tagging and auditing.</p>
	<p>Medium term (within the next 3-5 years). Review of in-house City general waste and recycling collection (parks and reserves), software systems for data capture and analysis. Potential introduction of a 3 bin system (FOGO) subject to availability of suitable FOGO processor.</p>
	<p>Long term (more than five years) Assessment of future use of Walliston Transfer Station, pending licence conditions and approvals.</p>

Part 2 - Implementation plan

The implementation plan outlines the actions which your local government will use over the next 5 years to contribute to the achievement of relevant Water Strategy targets and objectives. It shows the priorities identified in the summary (Part 1 - 7.2 Summary). Table 2.1.1 provides an overview. Please refer to the Council's Discussion Paper and the relevant Strategic Plan 2020-2025 for more information on the implementation plan. It is a living document and will be updated as the implementation plan evolves.

Area	Objective	Key Action	Responsible Party	Timeline	Target (SMART)	Progress	Key Performance Indicators	Notes
1	Water services	Improve the reliability of water supply to all customers	1. Complete the Water Treatment Plant Upgrade (WTPU) - Phase 1 by July 2021. 2. Complete the WTPU - Phase 2 by July 2022. 3. Complete the WTPU - Phase 3 by July 2023. 4. Complete the WTPU - Phase 4 by July 2024. 5. Complete the WTPU - Phase 5 by July 2025. 6. Complete the WTPU - Phase 6 by July 2026. 7. Complete the WTPU - Phase 7 by July 2027. 8. Complete the WTPU - Phase 8 by July 2028. 9. Complete the WTPU - Phase 9 by July 2029. 10. Complete the WTPU - Phase 10 by July 2030.	July 2021	100% of the population to receive water supply	Yes	Water supply reliability	Water supply reliability
2	Water services	Reduce the volume of water lost from the network	1. Complete the Water Loss Audit (WLA) by July 2021. 2. Complete the WLA - Phase 2 by July 2022. 3. Complete the WLA - Phase 3 by July 2023. 4. Complete the WLA - Phase 4 by July 2024. 5. Complete the WLA - Phase 5 by July 2025. 6. Complete the WLA - Phase 6 by July 2026. 7. Complete the WLA - Phase 7 by July 2027. 8. Complete the WLA - Phase 8 by July 2028. 9. Complete the WLA - Phase 9 by July 2029. 10. Complete the WLA - Phase 10 by July 2030.	July 2021	Reduce water loss to 10% of total water supply	Yes	Water loss reduction	Water loss reduction
3	Water infrastructure	Upgrade the water infrastructure to meet the needs of the community	1. Upgrade the water infrastructure - Phase 1 by July 2021. 2. Upgrade the water infrastructure - Phase 2 by July 2022. 3. Upgrade the water infrastructure - Phase 3 by July 2023. 4. Upgrade the water infrastructure - Phase 4 by July 2024. 5. Upgrade the water infrastructure - Phase 5 by July 2025. 6. Upgrade the water infrastructure - Phase 6 by July 2026. 7. Upgrade the water infrastructure - Phase 7 by July 2027. 8. Upgrade the water infrastructure - Phase 8 by July 2028. 9. Upgrade the water infrastructure - Phase 9 by July 2029. 10. Upgrade the water infrastructure - Phase 10 by July 2030.	July 2021	100% of the water infrastructure to be upgraded	Yes	Water infrastructure upgrade	Water infrastructure upgrade
4	Water infrastructure	Improve the efficiency of water use	1. Complete the Water Efficiency Audit (WEA) by July 2021. 2. Complete the WEA - Phase 2 by July 2022. 3. Complete the WEA - Phase 3 by July 2023. 4. Complete the WEA - Phase 4 by July 2024. 5. Complete the WEA - Phase 5 by July 2025. 6. Complete the WEA - Phase 6 by July 2026. 7. Complete the WEA - Phase 7 by July 2027. 8. Complete the WEA - Phase 8 by July 2028. 9. Complete the WEA - Phase 9 by July 2029. 10. Complete the WEA - Phase 10 by July 2030.	July 2021	100% of the water infrastructure to be efficient	Yes	Water efficiency	Water efficiency
5	Public and community	Engage the community in water services	1. Complete the Community Engagement Plan (CEP) by July 2021. 2. Complete the CEP - Phase 2 by July 2022. 3. Complete the CEP - Phase 3 by July 2023. 4. Complete the CEP - Phase 4 by July 2024. 5. Complete the CEP - Phase 5 by July 2025. 6. Complete the CEP - Phase 6 by July 2026. 7. Complete the CEP - Phase 7 by July 2027. 8. Complete the CEP - Phase 8 by July 2028. 9. Complete the CEP - Phase 9 by July 2029. 10. Complete the CEP - Phase 10 by July 2030.	July 2021	100% of the community to be engaged	Yes	Community engagement	Community engagement
6	Public and community	Improve the quality of water services	1. Complete the Water Quality Audit (WQA) by July 2021. 2. Complete the WQA - Phase 2 by July 2022. 3. Complete the WQA - Phase 3 by July 2023. 4. Complete the WQA - Phase 4 by July 2024. 5. Complete the WQA - Phase 5 by July 2025. 6. Complete the WQA - Phase 6 by July 2026. 7. Complete the WQA - Phase 7 by July 2027. 8. Complete the WQA - Phase 8 by July 2028. 9. Complete the WQA - Phase 9 by July 2029. 10. Complete the WQA - Phase 10 by July 2030.	July 2021	100% of the water services to be of high quality	Yes	Water quality	Water quality
7	Public and community	Reduce the environmental impact of water services	1. Complete the Environmental Impact Audit (EIA) by July 2021. 2. Complete the EIA - Phase 2 by July 2022. 3. Complete the EIA - Phase 3 by July 2023. 4. Complete the EIA - Phase 4 by July 2024. 5. Complete the EIA - Phase 5 by July 2025. 6. Complete the EIA - Phase 6 by July 2026. 7. Complete the EIA - Phase 7 by July 2027. 8. Complete the EIA - Phase 8 by July 2028. 9. Complete the EIA - Phase 9 by July 2029. 10. Complete the EIA - Phase 10 by July 2030.	July 2021	100% of the water services to be environmentally friendly	Yes	Environmental impact	Environmental impact
8	Water	Improve the reliability of water supply to all customers	1. Complete the Water Treatment Plant Upgrade (WTPU) - Phase 1 by July 2021. 2. Complete the WTPU - Phase 2 by July 2022. 3. Complete the WTPU - Phase 3 by July 2023. 4. Complete the WTPU - Phase 4 by July 2024. 5. Complete the WTPU - Phase 5 by July 2025. 6. Complete the WTPU - Phase 6 by July 2026. 7. Complete the WTPU - Phase 7 by July 2027. 8. Complete the WTPU - Phase 8 by July 2028. 9. Complete the WTPU - Phase 9 by July 2029. 10. Complete the WTPU - Phase 10 by July 2030.	July 2021	100% of the population to receive water supply	Yes	Water supply reliability	Water supply reliability
9	Water	Reduce the volume of water lost from the network	1. Complete the Water Loss Audit (WLA) by July 2021. 2. Complete the WLA - Phase 2 by July 2022. 3. Complete the WLA - Phase 3 by July 2023. 4. Complete the WLA - Phase 4 by July 2024. 5. Complete the WLA - Phase 5 by July 2025. 6. Complete the WLA - Phase 6 by July 2026. 7. Complete the WLA - Phase 7 by July 2027. 8. Complete the WLA - Phase 8 by July 2028. 9. Complete the WLA - Phase 9 by July 2029. 10. Complete the WLA - Phase 10 by July 2030.	July 2021	Reduce water loss to 10% of total water supply	Yes	Water loss reduction	Water loss reduction
10	Behaviour change programs and initiatives	Engage the community in water services	1. Complete the Community Engagement Plan (CEP) by July 2021. 2. Complete the CEP - Phase 2 by July 2022. 3. Complete the CEP - Phase 3 by July 2023. 4. Complete the CEP - Phase 4 by July 2024. 5. Complete the CEP - Phase 5 by July 2025. 6. Complete the CEP - Phase 6 by July 2026. 7. Complete the CEP - Phase 7 by July 2027. 8. Complete the CEP - Phase 8 by July 2028. 9. Complete the CEP - Phase 9 by July 2029. 10. Complete the CEP - Phase 10 by July 2030.	July 2021	100% of the community to be engaged	Yes	Community engagement	Community engagement
11	Behaviour change programs and initiatives	Improve the quality of water services	1. Complete the Water Quality Audit (WQA) by July 2021. 2. Complete the WQA - Phase 2 by July 2022. 3. Complete the WQA - Phase 3 by July 2023. 4. Complete the WQA - Phase 4 by July 2024. 5. Complete the WQA - Phase 5 by July 2025. 6. Complete the WQA - Phase 6 by July 2026. 7. Complete the WQA - Phase 7 by July 2027. 8. Complete the WQA - Phase 8 by July 2028. 9. Complete the WQA - Phase 9 by July 2029. 10. Complete the WQA - Phase 10 by July 2030.	July 2021	100% of the water services to be of high quality	Yes	Water quality	Water quality
12	Behaviour change programs and initiatives	Reduce the environmental impact of water services	1. Complete the Environmental Impact Audit (EIA) by July 2021. 2. Complete the EIA - Phase 2 by July 2022. 3. Complete the EIA - Phase 3 by July 2023. 4. Complete the EIA - Phase 4 by July 2024. 5. Complete the EIA - Phase 5 by July 2025. 6. Complete the EIA - Phase 6 by July 2026. 7. Complete the EIA - Phase 7 by July 2027. 8. Complete the EIA - Phase 8 by July 2028. 9. Complete the EIA - Phase 9 by July 2029. 10. Complete the EIA - Phase 10 by July 2030.	July 2021	100% of the water services to be environmentally friendly	Yes	Environmental impact	Environmental impact
13	Behaviour change programs and initiatives	Engage the community in water services	1. Complete the Community Engagement Plan (CEP) by July 2021. 2. Complete the CEP - Phase 2 by July 2022. 3. Complete the CEP - Phase 3 by July 2023. 4. Complete the CEP - Phase 4 by July 2024. 5. Complete the CEP - Phase 5 by July 2025. 6. Complete the CEP - Phase 6 by July 2026. 7. Complete the CEP - Phase 7 by July 2027. 8. Complete the CEP - Phase 8 by July 2028. 9. Complete the CEP - Phase 9 by July 2029. 10. Complete the CEP - Phase 10 by July 2030.	July 2021	100% of the community to be engaged	Yes	Community engagement	Community engagement
14	Behaviour change programs and initiatives	Improve the quality of water services	1. Complete the Water Quality Audit (WQA) by July 2021. 2. Complete the WQA - Phase 2 by July 2022. 3. Complete the WQA - Phase 3 by July 2023. 4. Complete the WQA - Phase 4 by July 2024. 5. Complete the WQA - Phase 5 by July 2025. 6. Complete the WQA - Phase 6 by July 2026. 7. Complete the WQA - Phase 7 by July 2027. 8. Complete the WQA - Phase 8 by July 2028. 9. Complete the WQA - Phase 9 by July 2029. 10. Complete the WQA - Phase 10 by July 2030.	July 2021	100% of the water services to be of high quality	Yes	Water quality	Water quality
15	Other	Reduce the environmental impact of water services	1. Complete the Environmental Impact Audit (EIA) by July 2021. 2. Complete the EIA - Phase 2 by July 2022. 3. Complete the EIA - Phase 3 by July 2023. 4. Complete the EIA - Phase 4 by July 2024. 5. Complete the EIA - Phase 5 by July 2025. 6. Complete the EIA - Phase 6 by July 2026. 7. Complete the EIA - Phase 7 by July 2027. 8. Complete the EIA - Phase 8 by July 2028. 9. Complete the EIA - Phase 9 by July 2029. 10. Complete the EIA - Phase 10 by July 2030.	July 2021	100% of the water services to be environmentally friendly	Yes	Environmental impact	Environmental impact
16	City to develop Water Strategy	Engage the community in water services	1. Complete the Community Engagement Plan (CEP) by July 2021. 2. Complete the CEP - Phase 2 by July 2022. 3. Complete the CEP - Phase 3 by July 2023. 4. Complete the CEP - Phase 4 by July 2024. 5. Complete the CEP - Phase 5 by July 2025. 6. Complete the CEP - Phase 6 by July 2026. 7. Complete the CEP - Phase 7 by July 2027. 8. Complete the CEP - Phase 8 by July 2028. 9. Complete the CEP - Phase 9 by July 2029. 10. Complete the CEP - Phase 10 by July 2030.	July 2021	100% of the community to be engaged	Yes	Community engagement	Community engagement
17	Other	Improve the quality of water services	1. Complete the Water Quality Audit (WQA) by July 2021. 2. Complete the WQA - Phase 2 by July 2022. 3. Complete the WQA - Phase 3 by July 2023. 4. Complete the WQA - Phase 4 by July 2024. 5. Complete the WQA - Phase 5 by July 2025. 6. Complete the WQA - Phase 6 by July 2026. 7. Complete the WQA - Phase 7 by July 2027. 8. Complete the WQA - Phase 8 by July 2028. 9. Complete the WQA - Phase 9 by July 2029. 10. Complete the WQA - Phase 10 by July 2030.	July 2021	100% of the water services to be of high quality	Yes	Water quality	Water quality

Bin Audit Composition Category Details

Recyclable Components						
1	2	3	4 Description			
Recyclables	Paper	Recyclable Paper	Newspaper	Newspapers, Newspaper like pamphlets,		
			Glossy Paper	magazines (glossy) pamphlets, present wrapping paper,		
			Office Paper	A4 document paper, writing pads, letters, stationery papers, Print / Writing Paper, envelopes		
			Coloured Paper	Coloured Paper		
			Composite Paper	Composite paper items where the weight of the paper is estimated to be greater the weight of the other materials, envelopes with transparent windows		
		Non-Recyclable Paper	Contaminated Paper	Paper towel, Paper Napkins, Contaminated Paper - soiled not recyclable		
			Other Paper	Non-Recyclable Paper, greaseproof paper, paper with wax coating, high wet strength papers, telephone books		
			Cardboard	Recyclable Cardboard	Corrugated Cardboard	Corrugated cardboard boxes,
					Packaged Flat Cardboard	packing boxes etc, cereal boxes, business cards, folding cartons
				Liquid Paper Board Foil Lined and Other	UHT / Long life milk, Soy Milk Cartons, some fruit juice cartons, Carbon barriers, Milk Cartons, Cardboard with wax coating, paper/disposable cups including biodegradable cups	
	Non-Recyclable Cardboard	Composite cardboard	Composite cardboard items where the weight of the cardboard is estimated to be greater the weight of the other materials, e.g. pringle boxes etc,			
		Contaminated Cardboard	Contaminated Cardboard e.g. pizza boxes			
	Plastics	Recyclable Plastics	PET #1	Soft drink bottles, juice bottles, some food & mouthwash containers (e.g. jam & sauce bottles, peanut butter jars) including coloured PET		
			HDPE#2	Milk and cream bottles, shampoo and cleaner bottles, HDPE bottles, including coloured HDPE		
			PVC#3	Cordial and juice bottles, blister packs, plumbing pipes and fittings, PVC labels		
			LDPE#4	Ice cream container lids, cream bottle lids, squeeze bottles, lids, builder's black plastic, black mulch film, plant nursery bags		
			Polypropylene#5	Ice cream containers, drinking straws, pot plant pots, some bottle caps, plastic garden settings, potato crisp bags, compost bins		
			Polystyrene #6	Yoghurt / sour cream containers, hot drink cups, take away containers, plastic cutlery, video/CD boxes, packaging foam, any foam		
			Plastic#7 Other	Tupperware, Mixed unidentifiable plastics, all other resins and multi-blend plastic materials		
			Non-Recyclable Plastics	Plastic Bags	Plastics Shopping Bags, Plastic Produce/Food Bags, Resealable Plastic Bags, Bin liners, Garbage bin liners, Compostable Plastics Bags	
				Plastic Film	Cling film	
				Composite (Mostly Plastic)	Composite plastic items where the weight of the plastic is estimated to be greater than the other material items	
		Glass		Recyclable Glass (CDS Glass)	Glass Bottles	Beer/Cider Mixed Drinks, Soft drink bottles, not broken glass
				Recyclable Glass	Glass Other	wine bottles, food and sauce jars,
		Non-Recyclable Glass	Miscellaneous/Other Glass	Plate glass (window and windscreen), broken light globes glass, glass particles, Black or ceramic lined glass, including broken glass that is recyclable more than 50mm in size		
			Ferrous (Steel)	Steel	Steel Cans	Food cans, pet food cans, tins, empty paint tins,
		Steel Aerosols			Aerosol cans	
	Composite Ferrous (Mostly Ferrous)	Composite ferrous items where the weight of the metal is estimated to be greater than the other material items				
	Non Ferrous (Aluminium)	Aluminium	Ferrous Other	Beer bottle tops, 100% ferrous items that are not cans / tins / packaging materials		
			Aluminium Cans	Beer and soft drink cans,		
			Aluminium Aerosols	Aluminium aerosol cans		
			Aluminium Foil	clean foil		
Composite Non-Ferrous (Mostly Non-Ferrous)			Composite non-ferrous metal items where the weight of the metal is estimated to be greater than the other material items			
Non-Ferrous Other	Copper / brass / bronze items, other metals (not ferrous / aluminium), Aluminium tamper proof seals					
Contaminants/Non-Recyclable Components						
Organic	Organic	Organic	Food Waste	Vegetable scraps, meat scraps, animal food, leftover food, Food particles, Bones		
			Green Waste	Grass clippings, tree trimmings / pruning's, flowers, tree wood		
			Packaged Food Waste	(Liquid containers - quarter full or more) and (Food Waste in containers or bags)		
	Other Organics	Other Organics	Wood/Timber	Milled wood / timber, wooden skewers		
	Textiles	Textiles	Textiles	(Natural/Synthetic - Apparel/Bedding etc.), (Leather and Rubber)		
Hazardous	Medical	Medical Waste	Other Textiles	Shoes, handbags, millinery etc		
			Soil/Dust 'n' Dirt and Inert and Broken Glass, Ash/Coal	Vacuum bag contents, soil, rocks, dirt, grit, mud, Broken Glass less than 50mm in size		
			Ceramics, Rocks/Stones, Bricks, Concrete	Bricks and stones, Cups, bowls, pottery items, concrete		
			Pharmaceuticals	Unused prescription medicine, vitamins and Minerals		
			Medical Waste	Band aids, Bandages, Used surgical gloves, Surgical Instruments, Medical aids/kits, Medical devices and radioactive materials, any solid waste generated from a diagnosis, treatment of humans or animals, /Medical Other		
	Pathogenic Infectious	Pathogenic Infectious	Hypodermic Syringes	Hypodermic Syringes, Epi Pens		
			Sanitary / Hygiene	used tissues (Items with any bodily fluids), tampons/pads, cotton buds)		
			Nappies	Adult and Child disposable nappies		
			Chemicals	Bleach, Shampoo, Cleaning Products, (where the weight of the product is estimated to be greater than the weight of the container)		
			Hazardous	Hazardous	Paint	Wet/Dry Paint
Batteries Household	Batteries (Single Use and Rechargeable), Mobile phone battery					
Batteries Other	Vehicle Batteries e.g. Car/Boat, Industrial batteries e.g. Power Supply (UPS)					
Fluorescent Tubes/Light Bulbs						
Oil Household, Motor & Other						
Other	Electronic Waste	Electronic Waste	Building Material			
			Hazardous Other	Uncategorized hazardous waste		
			Toner Cartridges	Toner Cartridges		
			Computer Equipment	Computer Components, Peripheral Devices/Computer Printer or Photocopier/Printer		
			Mobile Phones	Mobile phones		
Miscellaneous	Miscellaneous	Electrical Items	Electrical Products			
		Miscellaneous (Specify)	Any items not applicable to other categories			

GLOSSARY

Avoidance	Avoidance refers to the prevention or reduction of waste generation and is the most preferred option in the waste hierarchy.										
Better practice	Better practice refers to practices and approaches that are considered by the Waste Authority to be outcomes-focused, effective and high performing, which have been identified based on evidence and benchmarking against comparable jurisdictions.										
Commercial and industrial waste (CAI)	Solid waste generated by the business sector, State and Federal Government entities, schools and tertiary institutions.										
Commercial waste services	<ul style="list-style-type: none"> Refers to drop-off, kerbside, verge side or other waste services provided by the local government to commercial premises. Discretionary service, not offered by all local governments. 										
Construction and demolition waste (CAD)	Solid waste produced by demolition and building activities, including road and rail construction and maintenance, and excavation of land associated with construction activities.										
Disposal	<ul style="list-style-type: none"> Disposal refers to the discharge of waste into the environment, either into landfill or another disposal route. Disposal is the least preferred option in the waste hierarchy. 										
Drop-off facilities and services	<ul style="list-style-type: none"> Drop-off collections are where reportable waste is delivered to the waste depot (drop-off facility) by the residents of the local government i.e. self-hauled waste. Services are provided to collect waste or recyclable materials. May be temporary or permanent standalone drop-off points for one or more materials, or may form part of other waste facilities (such as landfills or transfer stations). Note: this does not include HHW drop-off points. 										
Energy recovery	The process of extracting energy from a waste stream through re-use, reprocessing, recycling or recovering energy from waste.										
Household hazardous waste (HHW) facility	<ul style="list-style-type: none"> Refers to facilities for the drop-off and storage of HHW. Includes consideration of the technology and infrastructure on site, staffing and resourcing, and any other waste facilities or services available at the site (e.g. green waste or recycling drop off, mulching, tip shop, etc.). 										
Illegal Dumping	<p>Illegal dumping is the unauthorised discharging or abandonment of waste and is an offence under Section 43A of the Environmental Protection Act 1986.</p> <p>Illegally dumped waste is generally considered to have the following attributes:</p> <table border="1"> <tr> <td>Volume</td> <td>> 1 cubic metre</td> </tr> <tr> <td>Environmental impact</td> <td>Contains items/substances that are potentially noxious or hazardous, potential for environmental harm if released, leaks, sprays or drips.</td> </tr> <tr> <td>Type of waste</td> <td>Commercial or industrial waste; larger scale household waste.</td> </tr> <tr> <td>Reason for offence</td> <td>Premeditated decision, commercial benefit or avoidance of law.</td> </tr> <tr> <td>Mode of deposition</td> <td>Deposited using a vehicle.</td> </tr> </table>	Volume	> 1 cubic metre	Environmental impact	Contains items/substances that are potentially noxious or hazardous, potential for environmental harm if released, leaks, sprays or drips.	Type of waste	Commercial or industrial waste; larger scale household waste.	Reason for offence	Premeditated decision, commercial benefit or avoidance of law.	Mode of deposition	Deposited using a vehicle.
Volume	> 1 cubic metre										
Environmental impact	Contains items/substances that are potentially noxious or hazardous, potential for environmental harm if released, leaks, sprays or drips.										
Type of waste	Commercial or industrial waste; larger scale household waste.										
Reason for offence	Premeditated decision, commercial benefit or avoidance of law.										
Mode of deposition	Deposited using a vehicle.										
Kerbside waste services	<ul style="list-style-type: none"> A regular, containerised collection service (often a wheeled bin) where the waste or recycling is collected from outside a resident's dwelling. Can apply to either recycling or general waste (and in a few instances green waste). 										
Landfill	<ul style="list-style-type: none"> Refers to inert or putrescible waste, registered or licensed landfills. Activities related to the layout, operation, management and post closure of a landfill. Includes consideration of the technology and infrastructure on site, staffing and resourcing, and any other waste facilities or services at the landfill site (e.g. green waste or recycling drop off, mulching, tip shop, etc.). 										
Litter	<p>Litter is defined in the Litter Act 1979 as including:</p> <ul style="list-style-type: none"> all kinds of rubbish, refuse, junk, garbage or scrap; and any articles or material abandoned or unwanted by the owner or the person in possession thereof. <p>but does not include dust, smoke or other like products emitted or produced during the normal operations of any mining, extractive, primary or manufacturing industry.</p> <p>Litter is generally considered to have the following attributes:</p> <table border="1"> <tr> <td>Volume</td> <td>< 1 cubic metre</td> </tr> <tr> <td>Environmental impact</td> <td>Nil or minor actual or potential environmental impact.</td> </tr> <tr> <td>Type of waste</td> <td>Personal litter.</td> </tr> <tr> <td>Reason for offence</td> <td>Unpremeditated, convenient disposal.</td> </tr> <tr> <td>Mode of deposition</td> <td>Deposited by hand (includes dropping by hand from a vehicle).</td> </tr> </table>	Volume	< 1 cubic metre	Environmental impact	Nil or minor actual or potential environmental impact.	Type of waste	Personal litter.	Reason for offence	Unpremeditated, convenient disposal.	Mode of deposition	Deposited by hand (includes dropping by hand from a vehicle).
Volume	< 1 cubic metre										
Environmental impact	Nil or minor actual or potential environmental impact.										
Type of waste	Personal litter.										
Reason for offence	Unpremeditated, convenient disposal.										
Mode of deposition	Deposited by hand (includes dropping by hand from a vehicle).										
Local government waste management	<ul style="list-style-type: none"> Refers to waste generated by a local government in performing its functions. Includes materials such as construction and demolition waste from road and footpath building and maintenance; green waste from parks maintenance; waste generated at local government offices, depots, and facilities. 										
Municipal solid waste (MSW)	Solid waste generated from domestic (residential) premises and local government activities.										
Peel region	The Peel region is the area defined by the Peel Region Scheme.										
Perth metropolitan region	The Perth metropolitan region or the Perth region is the area defined by the Metropolitan Region Scheme.										
Public place services	Public place waste services refers to permanent bins provided by local government in public places to collect waste and/or recycling.										
Recovery	The process of extracting materials or energy from a waste stream through re-use, reprocessing, recycling or recovering energy from waste.										
Reuse	Reuse refers to using a material or item again.										
Reprocessing	Reprocessing refers to using an item or material that might otherwise become waste during the manufacturing or remanufacturing process.										
Recycling	The process by which waste is collected, sorted, processed (including through composting), and converted into raw materials to be used in the production of new products.										
Residual Waste	<ul style="list-style-type: none"> Waste that remains after the application of a better practice source separation process and recycling system, consistent with the waste hierarchy as described in section 5 of the WARR Act. Where better practice guidance is not available, an entity's material recovery performance will need to meet or exceed the relevant stream target (depending on its source - MSW, CAI or CAD) for the remaining non-recovered materials to be considered residual waste under this waste strategy. 										
Special event waste services	Special event waste management refers to temporary bins and/or waste collection services provided by local government to manage waste generated at events such as festivals, displays, music festivals, sports events, markets etc.										
Sustainable procurement	Sustainable procurement involves meeting a need for goods and services in a way that achieves value for money and generates benefits not only to the organisation, but also to society and the economy, while minimising damage to the environment.										
Transfer station	<ul style="list-style-type: none"> Refers to facilities which undertake large scale consolidation of waste or recyclable materials for transfer to another facility for processing or disposal. Activities related to the layout, operation and management of a transfer station. Includes consideration of the technology and infrastructure on site, staffing and resourcing, and any other waste facilities or services available at the site (e.g. green waste or recycling drop off, mulching, tip shop, etc.). Verge side collection services are bulk, infrequent (every 4-6 months or on demand) services. 										
Verge side waste services	<ul style="list-style-type: none"> Material is collected from residential 'verge sides' either non-containerised or in a skip provided by the local government. Verge side services may relate to green waste or hard waste. Includes waste and/or recyclable materials that may be mixed or separated and the source and are include green waste or hard waste. 										
Waste services	Waste services are defined by the Waste Avoidance and Resource Recovery Act 2007 as the: <ul style="list-style-type: none"> the collection, transport, storage, treatment, processing, sorting, recycling or disposal of waste; or the provision of receptacles for the temporary deposit of waste; or the provision and management of waste facilities, machinery for the disposal of waste and processes for dealing with waste. 										