



City of Rockingham

Waste Plan

2020/2021



rockingham.wa.gov.au



Local government waste plan

City of Rockingham

Part 1 - services and performance

1.0 Introduction

Part 1 of the City of Rockingham 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 (SCP)	
Title:	City of Rockingham Strategic Community Plan 2019-2029
Came into force:	1-Jan-19
Date of next review:	31-Dec-29
Waste-related priorities:	Aspiration 2: Grow and Nurture Community Connectiveness and Wellbeing - Community engagement, Service and facilities
	Community engagement: Facilitate comprehensive community engagement on issues facing the City, ensuring that residents can provide input into shaping our future.
	Services and facilities: Provide cost effective services and facilities which meet community needs.
	Aspiration 3: Plan for Future Generations - Climate change adaptation, Sustainable waste solutions
	Climate change adaptation: Acknowledge and understand the impacts of climate change, and identify actions to mitigate and adapt to those impacts.
	Sustainable waste solutions: Incorporate new opportunities that support responsible and sustainable disposal of waste.
	Aspiration 4: Deliver Quality Leadership and Business Expertise - Leadership in sustainability, Benchmarking and Optimising Performance
	Leadership in sustainability: Provide community education on the management of waste, and provide opportunities for community involvement in sustainability programs.
	Benchmarking and optimising performance: Explore opportunities to review, enhance and optimise performance through local government benchmarking programs and community feedback mechanisms.

Corporate Business Plan (CBP)	
Title:	City of Rockingham Business Plan 20/21 - 29/30
Came into force:	Dec-19
Date of next review:	An Annual Customer Satisfaction Survey (end 2020) reviews the Business Plan, Annual Report
Waste-related priorities:	3.4 Waste Management - Major Expense Proposals (excluding plant), includes:
	1. Cell Construction - Cells 18 and 19 2023/2024
	2. Cell Capping - Cells 16 and 17 2024/2025
	3. Landfill Masterplan Construction 2020/2021
	5.3 Landfill Plant Management
	5.6 Replacement Waste Collection Plant
Sustainability Strategy (SS)	https://rockingham.wa.gov.au/forms-and-publications/your-city/our-vision/sustainability-strategy
Title:	City of Rockingham Sustainability Strategy
Came into force:	Feb-20
Date of next review:	2021
Waste-related priorities:	5.3 Element 3 - Waste and Resources
Goals:	Work towards the State Waste Strategy target of 20% waste reduction per capita by 2030.
	Increase community understanding and uptake of best practice waste separation and home composting.
	Become a leader in single use plastic reform and education, through implementation of the Single Use Plastics and Balloons Policy.

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 Rockingham 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⁾	127,428	129,240	132,760	136,280	160,696	179,072
Households ⁽¹⁾	47,196	47,867	49,170	50,474	59,517	66,323
Total domestic waste generated ⁽²⁾	71,152	72,709	70,940	72,480		
Waste generation per capita/year (kg) ⁽²⁾	558	563	534	532	530	503

(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

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

Three bin collection system with a 'GO' bin was implemented in 2015/2016. Smaller waste bin, larger capacity recycling bin and additional green waste bin doubled the City's domestic recovery rate from 23% to 48% in the same year. Community education and engagement programs assist in reducing contamination, however it is believed there is some public confusion caused by changes in local and international recycling markets and lack of consistent messaging across state and local governments has negated some of this work. In order for the City to achieve state waste recovery and avoidance targets, using current Waste Authority models, the City would need to implement FOGO.

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 Rockingham 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⁾	127,428	129,240	132,760	136,280			
Households ⁽¹⁾	47,196	47,867	49,170	50,474			
Overall recovery (%) ⁽²⁾	26%	25%	26%	41%	65%	67%	70%
Materials recovery	26%	25%	26%	41%	>80%	>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.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)

Please note that the overall recovery rates are distorted by waste and recycling received by both local and regional customers to the Millar Road Landfill.

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 Rockingham (LG to complete the table)

Waste management activity/service	Waste Authority better practice guideline or program	Date of adoption/ implementation	Comment
Residential Three Bin Collection System Upgrade	Better Bins Kerbside Collection Guidelines	2017/2018	
City of Rockingham Waste Local Law	Waste Local Law		Under development
Behaviour change	Waste Sorted Toolkit	From Waste Sorted Toolkit inception	Grow It Local March 2020, Bin Tagging Feb 2020, Plastic Free July, Clean Up Australia Day.
Hazardous Household Waste Facility	Hazardous Household Waste Program	Continuous	Permanent facility at the Millar Road Landfill, including Paintback Scheme

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
Litter hotspot used on a regular basis for littering in 17-18	Paparone Rd Baldivis Alatoona Rd Golden Bay Dandilion Rd Karnup McDonald Rd Baldivis Harvey Rd Karnup Mead St Rockingham
What are the main items littered at these hotspots?	Tyres, Mattress, White goods, Furniture, Couches, Household goods, Clothing, Asbestos, Car Parts Electrical goods, Concrete products, Sand and rubble and Garden waste
Current measures aimed at contributing towards the zero littering target	LitterBusters team for rapid response to littering and illegal dumping reports. Mobile App for reporting Signage. Mascot at events
Estimated cost of cleanup (due to collection, disposal, education, infrastructure and enforcement)	Illegal Dumping 19/2020 budget \$537,160 General Litter Collection 19/2020 budget \$352,078

Source: Local government Census data 2017-18

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

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

Is littering increasing or decreasing in your local government authority?	Similar
How were the costs associated with cleaning up litter calculated? Employee time? Dollar value? Both?	Budget allocation, does not include wages
Does the city have a litter strategy? If not, what is the ETA for completing one?	No, in the coming years once improved data has been achieved. See 4.1 of Implementation Plan.
Have any of the city's compliance and waste education officers undergone training on litter prevention? If so, what training?	The City's Waste Education Officer is responsible for waste avoidance and recycling education. Litter is managed via the Rapid Response team. The Rapid Response team receive regular in-house training, and also attend external workshops provided by state government.
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.	<p>Single Use Plastic and Balloon Policy (May 2019) restricts: Helium balloons are not to be released, used, sold or distributed. Council does not support any organised release of balloons in the City.</p> <p>Restrictions in policy:</p> <p>Helium balloons are not to be released, used, sold or distributed. Council does not support any organised release of balloons in the City.</p> <p>Single use plastic or polystyrene serving materials are not to be used, sold or distributed, where suitable fit for purpose alternatives are available.</p> <p>Single use plastic bags are not to be used, sold or distributed, including for promotional purposes.</p> <p>Bottled water is not to be provided at City functions where potable drinking water facilities are available.</p> <p>All avoidable plastic packaging, including cling wrap, plastic bags or similar must not be used in the purchase, sale, distribution and transport of food or goods, unless required under other conditions or legislation.</p> <p>Plastic event materials are to be reused where possible, including event signage and promotional banners.</p>
How does your local government measure the effectiveness and impact of programs designed to reduce littering and illegal dumping?	Reduction in tonnages collected
Which division/unit/section of your organisation is responsible for litter management/prevention? Waste services? Compliance (e.g. Rangers)? Infrastructure?	LitterBusters - Engineering Operations (Engineering and Parks Department)
How important is litter management to your organisation? (1 - Not at all important; 5 - Highly important).	5

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	\$603,972	
Sites used on a regular basis for illegal dumping in 2017-18. Where possible, please provide site address/es	5	Baldivis x 2 Rockingham x 1 Singleton x 1 Port Kennedy x 1
What are the main items dumped at these sites?	General household waste, furniture	
Current measures aimed at contributing towards the zero illegal dumping target	LitterBusters team for rapid response to littering an illegal dumping reports. Signage. Participation in WALGA RID Working Group.	

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?	Specific data not available. Refer to Litter above.
How does your local government measure the effectiveness and impact of programs designed to reduce illegal dumping?	Specific data not available. Refer to Litter above.
Which division/unit/section of your organization is responsible for illegal dumping management/prevention? Waste services? Compliance (e.g. Rangers)? Infrastructure?	LitterBusters - Engineering Operations (Engineering and Parks Department)

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

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 Rockingham (LG to complete the table if data available)

Date of data collection: **No Data Available**

Waste Type	# of incidents	Total approximate Weight (tonnes)	Change from previous year	Regulatory notices issued
C&I				
C&D				
E-waste				
Household waste				
Mulch & green waste				
Scrap metal				
Soil & excavated material				
Hazardous/problem waste				
Other				
TOTAL				
Cleaned up by	% of total incidents		Cleanup costs (\$)	
Local government				
Land owner				
Offender				
TOTAL				

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	27,392	-	42%	%	55% major regional centres 67% Perth and Peel	60% major regional centres 70% Perth and Peel
	comingled recyclables	15,146	12,328				
	green waste	10,766	10,307				
	FOGO	-	-				
Vergeside	green waste	1,684	1,684	50%	%		
	hard waste	2,422	369				
Drop-off	mixed waste	9,293	-	35%	%		
	dry recyclables	412	412				
	green waste	3,058	3,058				
	hard waste	1,475	1,475				
	hazardous waste						
Public place	mixed waste	800	-	0%	%		
	comingled recyclables	-	-				
Special event	mixed waste	32	-	0%	%		
	comingled recyclables	-	-				
Commercial	mixed waste	1,663	-	0%	n/a		
	comingled recyclables	-	-				
	paper/cardboard	-	-				
Local government waste	Illegal dumping clean up	387	25	80%	%		
	street sweepings	2429					
	roadworks	27692	24568				
	other C&D activities						
	roadside pruning						
	other (LitterBusters)	2024	1440				
TOTAL		106,675	55,666	52%			

Source: Local Government Census Data 2017/18

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)	11.34kg
Per capita (kg/per capita/week)	4.2
Audit year	2018
Composition	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	11%
Organics (organics, wood/timber, textiles, earth)	44%
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	
Other (electronic waste, miscellaneous)	45%

Garden organics or FOGO bin	
Yield per household (kg/hhl/week)	18.85kg
Per capita (kg/per capita/week)	7
Audit year	2018
Composition	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	<1%
Organics (organics, wood/timber, textiles, earth)	99%
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	
Other (electronic waste, miscellaneous)	<1%

Recycling bin	
Yield per household (kg/hhl/week)	14.9kg
Per capita (kg/per capita/week)	5.5
Audit year	2018
Composition	Total %
Recyclables (paper, cardboard, plastics, steel, aluminium, glass)	83%
Organics (organics, wood/timber, textiles, earth)	<1%
Hazardous (medical, sanitary/ hygiene, nappies, chemicals, paint, batteries, fluorescent tubes, light bulbs, oil, building material)	
Other (electronic waste, miscellaneous)	17%

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

Table 10 - 'Local government waste data' has been added to the table.

Table 11 - Data collected from 2018 Residential Kerbside Waste Audit prepared for the City by Dallywater.

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)
Millar Road Landfill Facility L7064/1997/11	Landfill and Recycling Facility	204 Millar Road West, Baldivis WA 6171	City of Rockingham	Class 3, Cat 61A, Cat 62 and 64	Inert waste type 1	Combined total of 50,000 tonnes per annual period	Approx. 30 years	2050
					Inert waste type 2			
					Special waste type 1	Combined total of 450,000 tonnes per annual period		
					Special waste type 2			
					Clean fill			
					Contaminated solid waste			
					Putrescible waste			
					Quarantine waste			
					Special waste type 3	7000 tonnes per annual period		
					Green waste			
Hazardous waste	Up to 99 tonnes per annual period							
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
Additional comments (local government to insert any additional comments that may be applicable)					

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
D&M Waste	Collection of green waste and bulk junk verge collection	Waste Collection	
Suez	Collection and processing of recycling and green waste bins	Waste Collection	
David Gray	Rubbish Bin Supplier	Waste Collection	
Total Packaging (WA)	Supply of Compostable and biodegradable Dog Waste Bags	Waste Collection	

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
Strategy	Sustainability Strategy	Feb-20	Details listed in P1 - 2IPR and 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 (under development)	
	ENDORSED BY WAPC:		
	NEXT REVIEW DUE:		
	Is waste considered and reflected in the Local Planning Strategy?	YES	NO
		Please provide details below: (under development)	
	Does the Local Planning Strategy identify current and future waste facility sites?	YES	NO
	Please provide details below: (under development)		
Local Planning Scheme	TITLE:	Town Planning Scheme No. 2	
	GAZETTED:	19-Nov-24	
	NEXT REVIEW DUE:	Following finalisation of Local Planning Strategy	
	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</i>) and included in the council Local Planning Scheme zoning table, with either a P/I/D/A/X permissibility?	Yes	
		If NO please provide comments below:	
	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")?	Please provide details below: - These uses would be interpreted as 'Industry - General (Licensed)' in Town Planning Scheme No. 2 - Deemed Provision of Planning and Development: 67. Matters to be considered by local government In considering an application for development approval the local government is to have due regard to the following matters to the extent that, in the opinion of the local government, those matters are relevant to the development the subject of the application - (iii) storage, management and collection of waste;	
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		
	If NO please provide comments below:		

Local planning policies	TITLE:	
	ADOPTED BY COUNCIL:	
	RELATIONSHIP TO WASTE STRATEGY OBJECTIVES:	
	Does the local government have any local policies which relate to the objectives of the Waste Strategy (reduce generation, increase recovery, protect the environment)?	No If YES please provide comments: No, the City doesn't have any Local Planning Policies as it relates to the objectives of the Waste Strategy. Whilst the City has some environmental related policies, these are aimed at environmental impacts from development. https://rockingham.wa.gov.au/planning-and-building/lodge-anapplication/planning-policies-procedures-and-information
Other	TITLE:	
	ADOPTED BY COUNCIL:	
	RELATIONSHIP TO WASTE STRATEGY OBJECTIVES:	

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 printer paper	Alignment with Waste Strategy targets, objectives or focus materials
Single Use Plastics and Balloon Policy	May-19	Ban on straws, balloon release, plastic bags. Where available and fit for purpose, find suitable compostable alternatives for plastic serving materials and packaging. This applies to all City operations, Traders operating with a City permit, and event shed in public places and local government property where approval is required from the City.	Plastic is a focus material
Paper Policy	Oct-08	Office paper used internally to be Australian 100% recycled paper	Paper is a focus material
Sustainability Strategy	Feb-20	Nil - recently released	5.3 Element 3: Work towards the State Waste Strategy target of 20% waste reduction per capita by 2030. Increase community understanding and uptake of best practice waste separation and home composting. Become a leader in single use plastic reform and education, through implementation of the Single Use Plastics and Balloons Policy.

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

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
Waste education program	Incursions, excursions, workshops focussed around educating and improving waste and recycling practises. Available to schools, community groups and residents of the City.	Awareness and education with the public on the importance of correct waste management practises. Provide skills and knowledge.	Number of people reached	Time constraints of school schedules and collection of required recycled materials is difficult. A typical excursion educates participants in what to place in each bins and how it is processed.	Extend existing officer resource to provide program and investigate other opportunities to deliver messaging i.e.: programs, target problem areas.
Grow It Local	Program to enable people to connect and learn about food waste reduction, composting.	New program	Number of people targeted and workshops organised. Number of connections on online platform. Number of people registering "their patch".	No measurements taken yet. Will be assessed in year two of program when comparison data is available.	NA
Seaside Scavenge	Public clean up event with guest speakers, entertainment. Litter swapped for tokens in pop up second hand market.	Educate and communicate with the public on the importance of correct waste disposal behaviour, prevention of plastic in the ocean, fast fashion, reuse, recycling.	Tonnages of litter collected, number of registrations	2019 less people and waste collected than in 2018. Event organiser did not engage local business and guest speaker in 2019.	Engage more with local businesses with pledges and support for event. Large portion of kids - provide more children's items in pop upmarket to encourage. More advertisement of prizes. Have local event organiser so can engage more with community.
Upcycle Project	Entry pathway for schools to enter the City's Castaways Recycled Art Exhibition. Involves waste excursion and development of sculpture out of recycled materials with the assistance of a local artist.	School groups are educated in the message of reuse and recycling, a key message of Castaways.	Number of schools entries	Time constraints of schools and collection of required recycled materials is difficult.	A new format is currently under investigation to reduce the needs for City resources and meet the time constraints of schools.
Schools Recycling Program	Recycling bins provided to schools who have participated in the waste education program at no cost to the school	Capture of recycled products from school waste. Put learnings of waste excursion into practise into the school community.	Number of schools with recycling bins	Program has run for a number of years - no check if all schools are continuing to use bins correctly.	Annual survey questioning bin use, problems encountered, bin repairs, contamination, additional learning resources required. Random bin tagging inspection.
Bin Tagging	State government program: provides direct feedback to residents on waste practises	Overall improvement of residential home disposal practises in target area	Baseline data collected. Properties are assessed weekly over a 6 week period. Number of positive faces provided to properties improves from the first inspection.	Bin tagging (Feb 2020) suspended due to COVID-19	Target more areas

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

Please provide comment if your regional council is undertaking the waste education function for your local government.

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 Tick		Comment
	YES	NO	
Does the local government have access to adequate waste data to complete Part 1 of the waste plan?	YES		The City's data collection system is mostly accurate, however can be influenced by external factors including waste disposed at the Millar Road Landfill originating outside of the City's LGA border.
Does the local government use waste data when undertaking planning activities for waste projects/programs?	YES		The City's data collection system is mostly accurate, however can be influenced by external factors including waste disposed at the Millar Road Landfill originating outside of the City's LGA border.
Does the local government have access to adequate waste data for this purpose?	YES		The City's data collection system is mostly accurate, however can be influenced by external factors including waste disposed at the Millar Road Landfill originating outside of the City's LGA border.
Does the local government use waste data when monitoring or assessing waste projects/programs?	YES		The City's data collection system is mostly accurate, however can be influenced by external factors including waste disposed at the Millar Road Landfill originating outside of the City's LGA border.
Does the local government have access to adequate waste data for this purpose?	YES		The City's data collection system is mostly accurate, however can be influenced by external factors including waste disposed at the Millar Road Landfill originating outside of the City's LGA border.
Does the local government use adequate waste data to measure progress toward the targets and objectives of the Waste Strategy?	YES		Some data is calculated based on assumptions, by portioning some waste sources i.e.: waste collected from commercial and residential properties in same truck.
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)	IN PART		Some data is calculated based on assumptions, by portioning some waste sources i.e.: waste collected from commercial and residential properties in same truck. Also there is some crossover of data collected influenced by external factors including waste disposed at the Millar Road Landfill originating outside of the City's LGA border.
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		The City currently does not collect data on the breakdown was litter and illegal dumping.
Are there any ways which local government waste data collection, storage or use could be improved?	YES		Trailer loads of waste are not weighed at the Millar Road Landfill, therefore tonnages per load are based on assumption. (The weight of waste is captured through the transfer station as a total truck load). The source for these type of loads are also not recorded (i.e.: City of Rockingham vs City of Kwinana), however the City is working on improving this data utilising existing functions on weighbridge software. The weight of bric-a-brac dropped off and sold at the Recycling Yard is not recorded as no weights are recorded.
Is the data collected by the local government accurate? Are any new strategies needed to improve accuracy?	IN PART		Please see above assumptions and methods.
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?	YES		
Any additional comments?		NO	

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)*

Waste management achievements (for example, performance/achievement against Waste Strategy targets or objectives or where particular waste management objectives have already been met)	<p>The rapid response Litterbusters team was first deployed in 2015 and has since responded to over 6,500 reports of litter and illegal dumping.</p> <ul style="list-style-type: none"> • Rollout of the three bin system (additional bin for garden waste) resulted in the waste recovery rate increasing from 23% to 46% in the first three months of its implementation. • In response to growing community concern and observed impacts on the marine environment, Council recently endorsed a policy on Single Use Plastics and Balloons (the Policy). The Policy aims to control the use and distribution of these materials and while other local governments have introduced similar positions, this was the most extensive of its kind in WA. The Policy was also supported by an educational guideline 'Turn the Tide on Plastic, to promote broader awareness and understanding on the issue.
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)	
Priority areas for action in Part 2 – Implementation plan	Ongoing (activities currently under way and/or continuously undertaken). Waste education programs, events and work shops including Bin Tagging Program. Waste collection and disposal services.
	Short term (within the next 1-2 years)
	Medium term (within the next 3-5 years)
	Long term (more than five years)

Part 2 - Implementation plan

This implementation plan outlines the actions which your local government will take over the next 5+ years to contribute to the achievement of relevant Waste Strategy targets and objectives. It is where the priorities described in the summary (*Part 1 – 7.0 Summary, Table 20*) are translated into actions. Please refer to the *Guidance Document* under sections: **4.0 How to complete Part 2 – implementation plan, 5.0 Better practice and 6.0 Waste management tools**, when developing this implementation plan.

Table 21: Implementation plan

Waste Management Tool	Action (OR link to existing local government plan/document that details this activity)	Is the action new or existing?	Detailed 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)
								Avoid	Recover	Protect		
1. Waste services	1.1 Support the establishment of a viable composting stream by introducing incentives for home composting. (From Sustainability Strategy)	Existing	<ol style="list-style-type: none"> Investigate available options and case studies from other local governments. Select the best option. Seek Council approval if applicable. Plan and implement the incentive program including any required changes to fees and charges. Promote the initiative to the City's residents. 	<ol style="list-style-type: none"> Best option for home composting incentives selected by 30 November 2020. Council endorsement and amendments to fees and charges where applicable completed by 30 April 2021. Incentive introduced to residents by 30 June 2021. 	At least 20 additional home composting bins are procured by residents in the 2021-22 financial year, compared to the baseline.	Jun-21	Yes	√			Strategic Planning and Environment	<p><i>Risks:</i> Competing priorities leading to delays.</p> <p><i>Mitigation:</i> Manage expectations so that timelines established are able to be met, ensure sufficient time is allocated for delivery</p>
	1.2 Provide and clearly sign 'bottle only' recycle bins at all events to align within the Container Deposit Scheme rollout and in view of the high levels of contamination observed at events. (From Sustainability Strategy)	Existing	<ol style="list-style-type: none"> Design appropriate signage for the bins. Order additional bins if required. Order signage for the bins. Develop communications and processes to inform event holders of the availability of the new bottle only bins. Install signs on bins. 	<ol style="list-style-type: none"> Orders for bins and signage completed by 30 June 2020. Communications package ready by 23 September 2021. Bins ready for service by 30 September 2021. 	All event holders and charities are aware of the option to recycle Container Deposit Scheme materials using the new signed 'bottle only' bins.	Oct-21	Yes	√	√	√	Waste Services, with input from Strategic Planning and Environment	<p><i>Risk:</i> Lack of uptake of the new bins.</p> <p><i>Mitigation:</i> Develop and effectively use communications to ensure behaviour change.</p>
	1.3 Increase the capture of reusable goods and source separation at the Millar Rd Landfill Facility Re-use Shop'.	New	<ol style="list-style-type: none"> The City is in the process of redesigning the redevelopment of the landfill transfer station, reuse yard and weighbridge. Civil construction to commence soon. 	<ol style="list-style-type: none"> Recommendations and analysis completed by June 2022. Council endorsement of the intended amendments by October 2022. Communicate change to stakeholders by Feb 2023. Complete planned changes including signage and traffic management by June 2023. 	Move towards a 10% reduction in waste generation per capita by 2025 as per the Waste Strategy 2030 target.	Jun-23	Yes	√	√		Infrastructure Project Delivery with input from Waste Services	<p><i>Risk:</i> Cost and resource implications to introduce and maintain the service.</p> <p><i>Mitigation:</i> Assess viability of the service against the community and environment benefits and implement effectively with on-going communications.</p>

Waste Management Tool	Action (OR link to existing local government plan/document that details this activity)	Is the action new or existing?	Detailed 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)
								Avoid	Recover	Protect		
	1.4 Introduce three Better Practice 3bin FOGO system by 2025.	New	<ol style="list-style-type: none"> Investigate case studies from other local governments that have introduced the service. Consider the funding available through the Better Bins Plus: Go FOGO program. Put forward all options to Council to determine the best course of action. If endorsed by Council, subject to grant funding, apply for funding with the Waste Authority. Plan the change-over to a FOGO system. Develop a comprehensive communication, education and behaviour change program. Make the switch to FOGO. 	<ol style="list-style-type: none"> Report to Council implementation plan, completed by 30 June 2023. Grant funding application completed by September 2023. Behaviour change program and communications completed by 30 June 2025. Pending outcome of feasibility study outcomes and Council approval, implementation of FOGO by July 2025 	<ol style="list-style-type: none"> Increase overall material recovery for the City of Rockingham to 67% by 2025 in line with the waste Strategy target. Make the FOGO system available to all properties that currently use the GO bin, to be rolled out in 2025. 	Jul-25	No - The capital costs will need to be budgeted in the 2024/25 annual budget. Changes to operating costs will need to be factored into the long-term financial plan.		v		Waste Services, with input from Strategic Planning and Environment	<p><i>Risk:</i> Costs -capital and operating, space for bins, contamination levels, compost quality, end-market for product, resources for on-going education.</p> <p><i>Mitigation:</i> Carefully consider the merits against the risks of introducing a 3-bin FOGO system. If proceeding ensure a comprehensive education and behaviour change program.</p>
	1.5 If viable for the City after considering all the benefits and disbenefits enter into an agreement to send the waste from the red lidded bin to a waste to energy plant for energy recovery.	New	<ol style="list-style-type: none"> Complete tender specifications for processing of waste from the red lidded waste bin at a waste to energy facility. Assess the viability of the option for the City of Rockingham after seeking tenders from Waste to Energy providers by July 2021. If viable to proceed, seek Council endorsement by September 2021. Complete the agreement with a suitable provider by December 2021. 	<ol style="list-style-type: none"> Tenders advertised by May 2021. Tenders assess by August 2021. Commence delivery of residual waste after January 2022. 	<ol style="list-style-type: none"> In line with the Waste Strategy 2030 target 'From 2020 – Recover energy only from residual waste.' In line with the Waste Strategy 2030 target - '2030 – No more than 15% of waste generated in Perth and Peel regions is landfilled'. 	Dec-21	Yes		v	v	Waste Services	<p><i>Risk:</i> The cost and longer-term implications for operations at the Millar Road landfill site. Pushback from Council and the community.</p> <p><i>Mitigation:</i> Careful consideration of all options and where possible negotiate an effective Gate Fee and contract conditions. Ensure effective communications with key stakeholders.</p>

Waste Management Tool	Action (OR link to existing local government plan/document that details this activity)	Is the action new or existing?	Detailed 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)
								Avoid	Recover	Protect		
	1.6 Investigate options to introduce changes to vergeside collections to improve material recovery and reduce illegal dumping.	New	<ol style="list-style-type: none"> 1. Assess the options available in the WALGA Better Practice Verge Collections. 2. Investigate available options and case studies from other local governments. 3. Seek expressions of interest to make applicable changes with third party suppliers. 4. Prepare a report to Council for endorsement of the changes. 5. Plan the changes to the program including contractual changes where applicable (this could include a tender process). 6. If applicable, communicate changes to residents and other key stakeholders. 7. Implement the changes. 	<ol style="list-style-type: none"> 1. Research completed by March 2023. 2. Expressions of interest received by August 2023. 3. Council endorsement received by November 2023. 4. If applicable, tenders or quotes received by March 2024. 5. New services/changes introduced by September 2025. 6. Review improvements to material recovery and/or illegal dumping from baseline data. 	<ol style="list-style-type: none"> 1. Increase material recovery from vergeside collections by at least 10% from 2022/23 from baseline levels. 2. Increase overall material recovery for the City of Rockingham to 67% by 2025 in line with the waste Strategy target. 3. Move towards zero illegal dumping by 2030. 	Sep-25	No - If the change is to be implemented, the amended operating costs will need to be budgeted from 2021/22 onwards.	v	v	v	Waste Services with input from Strategic Planning and Environment	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program. Pushback from the community for services that may vary from what is currently normal.</p> <p><i>Mitigation:</i> Project manage having consideration for other priorities. Ensure effective communication with residents and other key stakeholders.</p>
2. Waste infrastructure	2.1 Optimise safety, recovery and customer experience at the Millar Road Landfill by reconfiguring layout at the transfer station, recycling yard and entry/ exit points.	New	<ol style="list-style-type: none"> 1. Conduct a SWOT analysis for the Millar Road landfill site. 2. Hire a consultant, if necessary to provide advice on the best available options. 3. Plan the changes to ensure minimum disruption of service to the community. 4. Inform Council of the intended changes. 5. Hire consultants for traffic management and sign planning. 6. Communicate the changes to the community. 7. Implement the changes. 	<ol style="list-style-type: none"> 1. Recommendations and analysis completed by June 2022. 2. Council endorsement of the intended amendments by October 2022. 3. Communicate change to stakeholders by Feb 2023. 4. Complete planned changes including signage and traffic management by June 2023. 	1. 5% Increase customer satisfaction levels from baseline data collected through the annual market survey.	Jun-23	Yes		v	v	Infrastructure Project Delivery with input from Waste Services	<p><i>Risk:</i> Time, resources and expertise required to plan and implement the project. Delays and confusion during the change implementation.</p> <p><i>Mitigation:</i> Research, project manage having consideration for other priorities and hire a consultant if required. Communicate and ensure effective signage and traffic management.</p>

Waste Management Tool	Action (OR link to existing local government plan/document that details this activity)	Is the action new or existing?	Detailed 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)
								Avoid	Recover	Protect		
	2.2 Redesign the transfer station to allow increased capability for segregation of waste and recyclable materials that arrive at the drop-off facility.	New	<ol style="list-style-type: none"> Hire a consultant to assess and provide recommendations. If applicable, seek Council endorsement for the changes and budget amendments. Plan the implementation of the changes to ensure minimum disruption of services. Communicate changes to stakeholders. Implement the changes. 	<ol style="list-style-type: none"> Recommendations and analysis completed by June 2022. Council endorsement of the intended amendments by October 2022. Communicate change to stakeholders by Feb 2023. Complete planned changes including signage and traffic management by June 2023. 	Increase material recovery at the transfer station by at least 10% from the baseline from the 2023/24 financial year onwards.	Jun-23	Yes		v	v	Infrastructure Project Delivery with input from Waste Services	<p><i>Risk:</i> Time, resources and expertise required to plan and implement the project. Insufficient use of the new facility.</p> <p><i>Mitigation:</i> Research, project manage having consideration for other priorities and hire a consultant if required. Communicate changes to ensure maximum use of the facility.</p>
	2.3 Increase the number of public litter recycling bins in key activity areas such as the foreshore and CBD area and implement standardised informative signage. (From Sustainability Strategy)	Existing	<ol style="list-style-type: none"> Identify and finalise key activity areas where better public litter bins and recycling solutions can be introduced. Seek quotes and order infrastructure required. Design and order signage using Waste Sorted communications where possible to ensure consistent messaging. Inform the community. 	<ol style="list-style-type: none"> Key activity areas identified by June 2021. Infrastructure ordered by July 2021. Signage order completed by August 2021. Installation completed by November 2021. Community informed of the new infrastructure by December 2021. 	<ol style="list-style-type: none"> 10% increase in public place material recovery rates from the baseline levels starting from the 2021/22 financial year. Increase overall material recovery for the City of Rockingham to 67% by 2025 in line with the waste Strategy target. Move towards zero illegal dumping by 2030. 	Dec-21	Yes		v	v	Waste Services with input from Strategic Planning and Environment	<p><i>Risk:</i> Lack of interest and understanding by the community leading to high levels of contamination.</p> <p><i>Mitigation:</i> Research, plan and consider the best options to implement the program. Ensure effective signage and communications.</p>
3. Policies and procurement	3.1 Develop a sustainability procurement guideline, focused on waste minimisation in addition to criteria for energy efficiency and emissions. (From Sustainability Strategy)	Existing	<ol style="list-style-type: none"> Review WALGA's Sustainable Procurement Guide. Investigate available options and case studies from other local governments. Invite participation on the policy development from key internal stakeholders. Draft the sustainable procurement guideline. Seek Council endorsement. Adopt the guideline and complete key amendments to procurement policy and procedures. 	<ol style="list-style-type: none"> Review of available options and best practice completed by August 2020. Draft guide completed by December 2020. Council endorsement by March 2021. Amendments to policy and procedure completed and communicated to internal stakeholders by June 2021. 	<ol style="list-style-type: none"> From June 2021, all internal stakeholders involved with purchasing responsibility are aware of the new guide and requirements for sustainable procurement. 20% reductions in the City's carbon footprint as a result of the new sustainable procurement practices from 2021/22 onwards. 	Jun-21	Yes	v		v	Strategic Planning and Environment, with input from Procurement	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program. Pushback from internal stakeholders.</p> <p><i>Mitigation:</i> Project manage having consideration for other priorities. Communicate throughout the development of the guide and once the changes are completed.</p>

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	3.2 Become a leader in single use plastic reform and education, through implementation of the Single Use Plastics and Balloons Policy. (From Sustainability Strategy)	Existing	<ol style="list-style-type: none"> Promote the Single Use Plastics and Balloons Policy to event organisers and community groups and internal teams. Investigate options to introduce incentives for events that avoid single use plastics. Seek Council approval to introduce new initiatives. Investigate options to collect single-use compostable replacements and introduce measures as required. Evaluate the effectiveness of the program, equating the volume of single use plastics reduced and the benefits to the environment. Communicate the improvements to the community. 	<ol style="list-style-type: none"> New initiatives supporting the Policy introduced by December 2020. Effectiveness of Policy and new measures evaluated by April 2021. Communications to stakeholders and residents completed by June 2021. 	<ol style="list-style-type: none"> Elimination of single-use plastics at civic events, Council events and events held on Council owned sites. In line with the WARR Strategy target - Move towards zero littering by 2030. 	Jun-21	Yes	v		v	Strategic Planning and Environment	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program. Pushback from the community.</p> <p><i>Mitigation:</i> Project manage having consideration for other priorities. Ensure effective communication.</p>
	4.1 Establish litter and illegal dumping data collection parameters and reporting responsibilities to capture information from existing practices (i.e. from Litterbusters or occasional beach tractor cleans after large events). (From Sustainability Strategy)	New	<ol style="list-style-type: none"> Assess the current data collection systems in place and identify gaps in the process. Consult internal stakeholders to identify issues and opportunities. Develop practical data capture mechanisms and reporting protocols 	<ol style="list-style-type: none"> Gap analysis completed by June 2021. Internal consultation completed by September 2021. Improvements to systems completed by December 2021. 	Have an improved litter data recording system in place for illegal dumping by December 2021.	Dec-21	Yes			v	Strategic Planning and Environment, with input with Engineering Services and Parks Services	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program. Pushback from staff.</p> <p><i>Mitigation:</i> Prioritise and implement on time. Involve staff in the process.</p>

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4. Data	4.2 Improve the integrity of data collected through weighbridge software by consolidating reporting to DWER.	New	<ol style="list-style-type: none"> 1. Assess the current data collection systems in place and identify issues in the data collection process. 2. Consult internal and external stakeholders to identify concerns and opportunities. 3. Amend the method of data collection from the software program as required to ensure ease of mandatory annual reporting to DWER. 	<ol style="list-style-type: none"> 1. Gap analysis completed by Jun 2021. 2. Internal consultation completed by Dec 2021. 3. Improvements to systems completed by June 2022. 	Have an improved reporting system in place for weighbridge data available for external stakeholders including DWER by June 2022.	Jun-22	Yes			√	Waste Services, Strategic Planning and Environment, with input with Engineering Services and Parks Services	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program.</p> <p><i>Mitigation:</i> Prioritise and implement on schedule.</p>
5. Behaviour change programs and initiatives	5.1 Introduce the Grow It Local Program to the residents of City of Rockingham	New	<ol style="list-style-type: none"> 1. Consult with other stakeholders within the organisation benefited by the introduction of the program. 2. Work towards a successful launch of the program to empower residents to connect and share skills and produce, learn about gardening, food miles, food waste reduction and composting. 	<ol style="list-style-type: none"> 1. Stakeholder consultation completed by November 2020. 2. Program introduced by March 2021. 	20 or more participants in the program by December 2021.	Mar-21	Yes	√			Waste Services and Community Development	<p><i>Risk:</i> Lack of interest from the community and time to implement the program.</p> <p><i>Mitigation:</i> Research, plan and consider the best options to implement the program. Ensure effective communications supported by the program coordinator.</p>
	5.2 Continue to implement a behaviour change program that promotes waste reduction and the correct use of bin infrastructure through a number of mediums such as excursions, incursions and electronic communications.	Existing	<ol style="list-style-type: none"> 1. Assess the value of current programs and tools available from the Better Practice Waste Sorted Program and other success stories. 2. Consult DWER and external stakeholders as required. 3. Organise tools required for the program 4. Develop a plan and schedule for the year. 5. Apply behaviour change measures through new and existing communication methods and tools to ensure consistent communication. 6. Evaluate and continuously improve. 	<ol style="list-style-type: none"> 1. Research on best options completed by July 2021. 2. Plan and schedule for the next year completed by September 2021. 3. Action program communications as per the plan and be flexible for new opportunities. 4. Order materials for any special programs 2-3 months in advance. 	<ol style="list-style-type: none"> 1. Have a plan and schedule for behaviour change programs ready by September each year for the following year. 2. 80% of planned actions of the behaviour change program completed as per the schedule. 3. Evaluate programs once each year. 	Jun-25	Yes	√	√	√	Waste Services	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program.</p> <p><i>Mitigation:</i> Prioritise and implement tasks on schedule. Where necessary, delegate and seek additional resourcing.</p>

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								Avoid	Recover	Protect		
	5.3 Investigate educational program and incentives to encourage prioritisation of recycling and composting streams. (Sustainability Strategy).	New	<ol style="list-style-type: none"> 1. Investigate available options and case studies from other local governments. 2. If fee amendments are required, seek Council approval. 3. Plan and implement changes by 30 June 2021. 4. Ensure that the changes are effectively communicated. 	<ol style="list-style-type: none"> 1. Option considered by 30 December 2022. 2. Council approvals in place by March 2022. 3. Initial communications for changes completed by 30 June 2022. 	If viable, new incentives introduced to increase recycling and composting.	Jun-22	Yes	√	√		Strategic Planning and Environment with input from Waste Services	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program. Lack of uptake.</p> <p><i>Mitigation:</i> Project manage having consideration for other priorities. Ensure effective communications.</p>
	5.4 Continue to conduct Bin Tagging in new areas each year to improve knowledge of how residents should separate with the 3-bin system.	Existing	<ol style="list-style-type: none"> 1. As part of the behaviour change program, plan the most appropriate dates to run the Bin Tagging Program. 2. Organise staffing and resources required. 3. Run the program in accordance with WALGA's Bin Tagging Guideline. 3. Assess the impact of the program. 4. Communicate the results to internal and external stakeholders. 	<ol style="list-style-type: none"> 1. Staffing and resources for Bin Tagging program in place at least 1 week prior to the Bin Tagging Program. 2. Report to key stakeholders completed within 1 month of the program completion. 	<ol style="list-style-type: none"> 1. Run a Bin Tagging program at least once each year. 2. Audit at least 500 households each time. 	Jun-25	Yes		√		Waste Services	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program each year.</p> <p><i>Mitigation:</i> Prioritise, delegate and seek additional staffing resources to assist with implementing on schedule.</p>
	5.5 Investigate measures to improve waste separation and management at City of Rockingham facilities (From Sustainability Strategy).	New	<ol style="list-style-type: none"> 1. Investigate available options and case studies from other local governments. 2. Select the best option. 3. Seek Council approval and buy-in from staff and stakeholders. 4. Plan and implement the program. 5. Collect data and measure performance. 6. Communicate the results to Council, staff and stakeholders. 	<ol style="list-style-type: none"> 1. Best options determined by Feb 2023. 2. Council endorsement received by May 2023. 3. New measures introduced by September 2023. 3. Results communicated to stakeholders at least once annually. 	Have an improved waste separation and management system in place at City facilities from September 2023.	Sep-23	Yes	√	√		Waste Services and Community Development	<p><i>Risk:</i> Time and staffing resources required to plan and implement the program. Pushback from staff and stakeholders.</p> <p><i>Mitigation:</i> Project manage having consideration for other priorities. Seek buy-in from staff and engage champions where possible. Communicate on-going successes.</p>

Waste Management Tool	Action (OR link to existing local government plan/document that details this activity)	Is the action new or existing?	Detailed 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)
								Avoid	Recover	Protect		
6. Other	6.1 Investigate becoming a TSA accredited council, Green Tyre Project or similar. (From Sustainability Strategy)	New	<ol style="list-style-type: none"> 1. Conduct a cost-benefit analysis for acquiring accreditation. 2. If viable, seek Council endorsement. 3. Complete any physical amendments required. 4. On receiving accreditation, promote to Council and the community including the benefits of the accreditation to the circular economy. 5. Complete annual reporting on time. 	<ol style="list-style-type: none"> 1. Cost-benefit analysis completed by Dec 2023. 2. Council approval received by March 2024. 3. Communications on receiving accreditation completed with a month. 4. Annual reporting completed on time. 	At least 95% of the tyres collected by the City are recycled correctly.	Jun-25	Yes		√	√	Strategic Planning and Environment	<p><i>Risk:</i> Costs, time and staffing resources required to plan and continue to implement the program.</p> <p><i>Mitigation:</i> Consider the benefits of accreditation and plan the management of tyres and annual reporting effectively.</p>

Bin Audit Composition Category Details

Recyclable Components				
1	2	3	4	Descriptors
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
		Non-Recyclable 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
			Contaminated Paper	Paper towel, Paper Napkins, Contaminated Paper - soiled not recyclable
	Cardboard	Recyclable Cardboard	Other Paper	Non-Recyclable Paper, greaseproof paper, paper with wax coating, high wet strength papers, telephone books
			Corrugated Cardboard	Corrugated cardboard boxes,
			Packaged Flat Cardboard	packing boxes etc, cereal boxes, business cards, folding cartons
		Non-Recyclable Cardboard	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
			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	Other Cardboard	Non-Recyclable Cardboard
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
			Ferrous Other	Beer bottle tops, 100% ferrous items that are not cans / tins / packaging materials
	Non Ferrous (Aluminium)	Aluminium	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 Putrescible	Animal excrement, mixed compostable items
	Other Organics	Other Organics	Wood/Timber	Milled wood / timber, wooden skewers
	Textiles	Textiles	Textiles	(Natural/Synthetic - Apparel/Bedding etc.), (Leather and Rubber)
			Other Textiles	Shoes, handbags, millinery etc
	Earth	Earth	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	
Hazardous	Medical	Medical Waste	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		
			Hypodermic Syringes	Hypodermic Syringes, Epi Pens		
	Pathogenic Infectious	Pathogenic Infectious	Sanitary / Hygiene	used tissues (items with any bodily fluids), tampons/pads, cotton buds)		
			Nappies	Adult and Child disposable nappies		
	Hazardous	Hazardous	Chemicals	Bleach, Shampoo, Cleaning Products, (where the weight of the product is estimated to be greater than the weight of the container)		
			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			
			Building Material			
			Hazardous Other	Uncategorized hazardous waste		
Other			Electronic Waste	Electronic Waste	Toner Cartridges	Toner Cartridges
					Computer Equipment	Computer Components, Peripheral Devices/Computer Printer or Photocopier/Printer
	Mobile Phones	Mobile phones				
	Electrical Items	Electrical Products				
	Miscellaneous	Miscellaneous	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-focussed, effective and high performing, which have been identified based on evidence and benchmarking against comparable jurisdictions.	
Commercial and industrial waste (C&I)	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, vergeside or other waste services provided by the local government to commercial premises. Discretionary service, not offered by all local governments. 	
Construction and demolition waste (C&D)	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 drop-off and storage procedures and infrastructure, staffing and resourcing, layout, operation and management HHW facilities, etc. 	
Illegal Dumping	Illegal dumping is the unauthorised discharging or abandonment of waste and is an offence under Section 49A of the <i>Environmental Protection Act 1986</i> . Illegally dumped waste is generally considered to have the following attributes:	
	Volume	> 1 cubic metre
	Environmental impact	Contains items/substances that are potentially noxious or hazardous; potential for environmental harm if material leaks, spreads or degrades
	Type of waste	Commercial or industrial waste; larger-scale household waste
	Reason for offence	Premeditated decision; commercial benefit or avoidance of fee
	Mode of deposition	Deposited using a vehicle

Kerbside waste services	<ul style="list-style-type: none"> • A regular, containerised collection service (often a wheelie 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 licenced 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. greenwaste or recycling drop off, mulching, tip shop, etc.) 	
Litter	Litter is defined in the <i>Litter Act 1979</i> as including: <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, 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. Litter is generally considered to have the following attributes:	
	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; greenwaste 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, C&I or C&D) 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 fireworks 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. greenwaste or recycling drop off, mulching, tip shop, etc.)
Vergeside waste services	<ul style="list-style-type: none"> • Vergeside collection services are bulk, infrequent (~every 4-6 month or on demand) services. • Material is collected from residential 'vergesides' either non-containerised or in a skip provided by the local government. • Vergeside 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 can include green waste or hard waste.
Waste services	<p>Waste services are defined by the <i>Waste Avoidance and Resource Recovery Act 2007</i> as the:</p> <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.