

Waste Plan

2020 – 2025





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Introduction

Local governments have an important contribution to make to the State Government's *Waste Avoidance and Resource Recovery Strategy 2030* targets for Western Australia. Local Government waste plans provide a link between the State Government waste strategy and local waste management activities. Local governments determine the most appropriate waste management solutions for their communities and must demonstrate how these waste services align with the state's objectives and targets.

The purpose of a local waste plan is to:

- align local government waste management activities with the State Waste Strategy
- map current performance and establish a benchmark to achieve Waste Strategy targets
- monitor progress on local government achievement of Waste Strategy targets
- design programs and activities which will support the implementation of waste plans.



Strategic context

The City of Subiaco's Waste Plan 2020 – 2025 allows for council and community to track the City's progress in delivering its environmental objectives and implementation actions (Figure 1).

Figure 1: Strategic context for the Waste Plan 2020 – 2025





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Background

All local governments in the Perth and Peel region and major regional centres that provide waste services, are required to develop waste plans for the 2020-21 financial year, and perform their functions in respect of waste management in accordance with their waste plans.

This waste plan guides the City of Subiaco in sustainable waste and recycling practices. Our aim is to establish and maintain consistent, cost effective and functional waste management practices to reduce waste to landfill. This is driven by the following targets set in the State Government's *Waste Avoidance and Resource Recovery Strategy 2030*.

By 2025

- Introduce food organics garden organics (FOGO) system
- Reduce household waste by 5 per cent per capita
- Increase recovery of materials from household waste to 67 per cent across the Perth and Peel regions

By 2030

- Reduce household waste by 10 per cent per capita
- Increase recovery of materials from household waste to 70 per cent across the Perth and Peel regions

The City is working towards a vision for Western Australia to become a sustainable low-waste circular economy in which human health and the environment are protected from the impacts of waste. The three target areas driving our waste management actions are:

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

Current situation

City of Subiaco's Waste Census Data

Every year, local governments are required to report to the Department of Water and Environmental Regulation (DWER) via the Local Government Waste Management Census. Note: the DWER did not publish Local Government Waste Census Data for the 2018/19 financial year.

Table 1: Percentage of waste diverted from Landfill for all collection services

Total recovery rates	2014/15	2015/16	2016/17	2017/18	2018/19
City of Subiaco	27%	27%	26%	29%	35%
Average for all Perth and Peel region local governments	36%	38%	40%	41%	no data
Waste strategy 2030 target for Perth and Peel municipal waste	65%	65%	65%	65%	65%

Figure 2: Local Government Census Data 2017/18 showing service type and waste collected

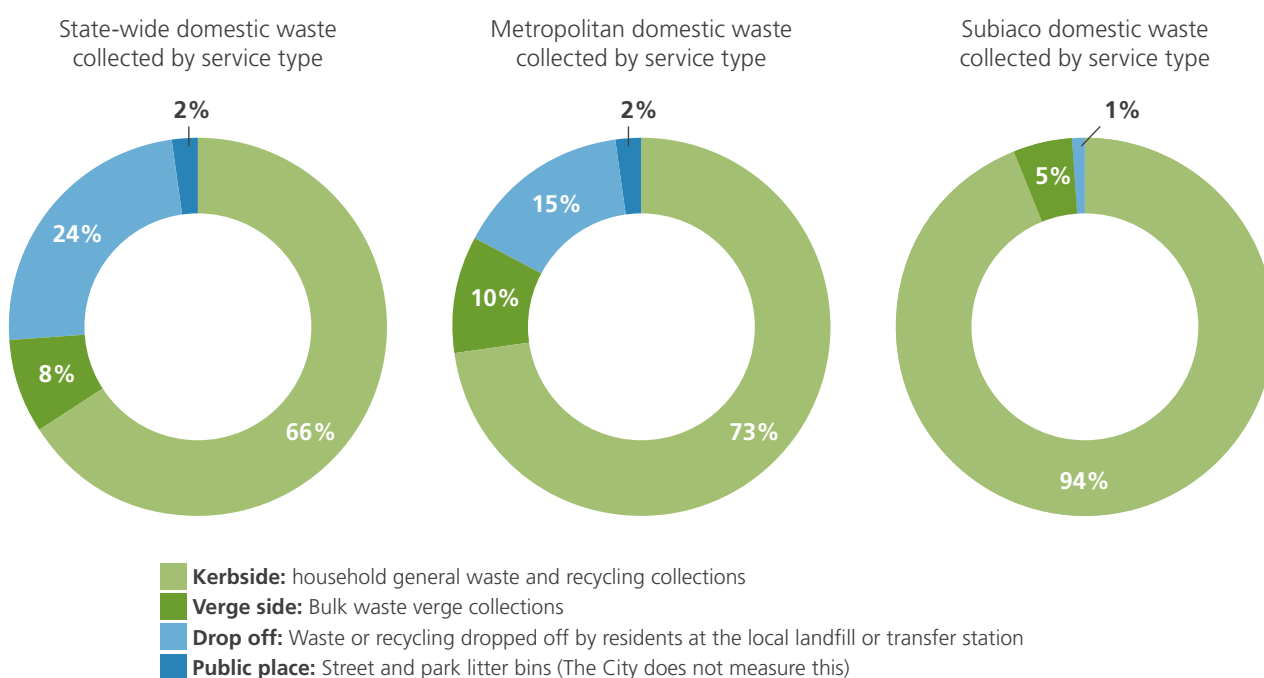


Table 2: Summary of City of Subiaco waste services collection data 2014/15 to 2018/19

This data shows the breakdown of the different service types and the amount of waste generated through each waste stream. Table 1 compares the City's kerbside and verge side collection data from 2014/15 to 2018/19, the data is presented in tonnes.

	2014/15				2015/16				2016/17				2017/18				2018/19			
	Collected (tonnes)	Landfilled (tonnes)	Recovered (tonnes)	Recovery (%)	Collected (tonnes)	Landfilled (tonnes)	Recovered (tonnes)	Recovery (%)	Collected (tonnes)	Landfilled (tonnes)	Recovered (tonnes)	Recovery (%)	Collected (tonnes)	Landfilled (tonnes)	Recovered (tonnes)	Recovery (%)	Collected (tonnes)	Landfilled (tonnes)	Recovered (tonnes)	Recovery (%)
Waste	6,823	6,663	160	2	6,594	6,567	27	0	5,476	5,476	0	0	5,239	5,221	18	0	4,726	4,726	0	0
Recycling	1,908	92	1,816	95	2,028	101	1,927	95	1,255	125	1,130	90	1,557	262	1,295	83	1,794	261	1,533	85
Green waste	743	0	743	100	695	0	695	100	917	0	917	100	672	0	672	100	852	0	852	100
Bulk verge	664	621	43	6	601	601	0	0	221	221	0	0	421	86	335	80	384	83	301	78
TOTAL	10,138	7,376	2,762	27	9,918	7,269	2,649	27	7,869	5,822	2,047	26	7,889	5,569	2,320	29	7,756	5,070	2,686	35
Per household (kg)	962				985				861				860				830			
Waste per capita	492				487				438				452				450			

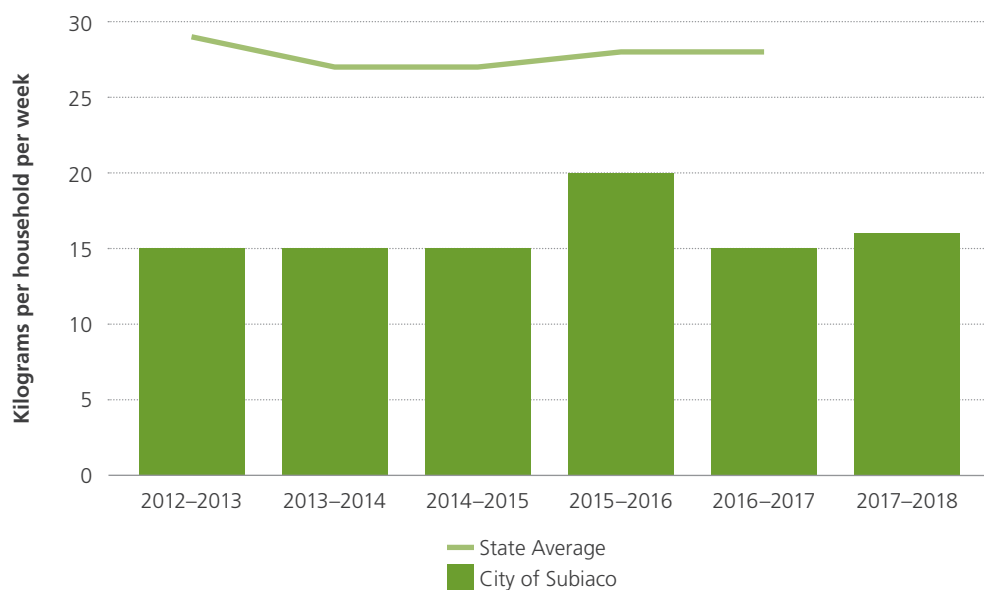
Note: 'household' includes around 15% small commercial/industrial premises

The City currently has a two bin system, with weekly general verge side waste collection, a fortnightly recycling verge side collection and weekly bagged and loose garden waste collection. This system diverted from landfill approximately 35 per cent of waste generated in 2018/19. Despite the weekly bagged garden waste collection, this is in line with the typical recovery rate of standard two bin systems and verge side collection systems which is below the state targets (see page 15 for more).

Waste generation

The City of Subiaco has a relatively low waste generation rate, per capita for both kerbside and verge side collections. Figure 3 shows the City's waste generate is consistently lower than the state average. This lower generation rate could be due to the effective waste avoidance behaviour change initiatives put in place through the City and the Western Metropolitan Regional Council (WMRC).

Figure 3: City of Subiaco waste generation compared to state average



Note: The DWER has not published Local Government Waste Census Data for the 2018/19 financial year.





Current waste management

The City is a member of the Western Metropolitan Regional Council (WMRC). The WMRC is made up of five member councils (City of Subiaco, Town of Cottesloe, Town of Claremont, Town of Mosman Park and the Shire of Peppermint Grove) and facilitates the West Metro Recycling Centre, waste education programs and helps the communities in Perth's western suburbs to manage and minimise waste.

The City provides a variety of waste services;

Kerbside collection

- Weekly collection of 120 and 240 litre general waste bins
- Fortnightly 240 litre recycling collection
- Weekly bagged and green waste collection
- The City has completed the changeover from a two bin system to single yellow bin recycling program for domestic recycling. Changeover of commercial and multi-unit dwellings (MUD) will be completed by 2022.
- MUDs and commercial premises will be converted to 660 litre waste and recycle bins.

Verge side collection

- Scheduled bulk waste collection twice a year

Waste drop off services

- Convenient locations to drop off household batteries, fluorescent light globes and tubes and printer cartridges for recycling at Homebase, Lords Recreation Centre and Subiaco Library.
- Waste and recycling drop off at West Metro Recycling Centre, seven days a week, including:
 - free recycling for cardboard, clothing, electronic waste, batteries, gas cylinders, mobile phones, motor oil, fluorescent globes, printer cartridges, scrap metal, polystyrene, X-rays and household hazardous waste (paints, pesticides, aerosols and flammables)
 - disposal of appropriately wrapped asbestos-containing material
 - tyre and mattress recycling
 - disposal of both bulk and green waste.

Community education, behaviour change and waste avoidance

- WMRC Recycling Hotline **9384 6711** where recycling questions are answered authoritatively
- The City provides educational initiatives through the WMRC including the Waste Watchers program (workshops, tours, talks and events) to encourage residents to live with less waste
- The City works with WMRC to provide information to residents about home waste management and the recycling system
- The City and the WMRC work with event managers to encourage low waste generation at community events
- WMRC is an active member of WALGA's consistent communications collective which aims to achieve consistent communication on waste management across local government areas

Littering and illegal dumping

- Littering and illegal dumping of waste can have serious environmental and economic effects, including reduced visual amenity, harm to our wildlife and even bushfires. Littering and illegal dumping issues are addressed by promptly transporting waste to the West Metro Recycling Centre. The City and the WMRC provide ongoing education, support and compliance activities, to encourage positive waste behaviours and reduce littering and illegal dumping.



A low-waste future

We're in this together

Managing waste and changing behaviour is something we need to do together. The State's environmental resources belong to all Western Australians and we all have a role to play in protecting them.

To be sustainable means to be a low-waste society. The City encourages a circular economy approach, where any waste that is generated is valued as a resource that can be reused or recycled for the benefit of the economy.

A circular economy also means we manage waste to protect the environment and it presents opportunities for increased local recycling activity. Local solutions create local jobs, and minimise the costs and impacts of unnecessary transport.

As a community member, there are some things you can do to improve waste practices at home, at work and in the community:

Reduce

- ✓ avoid single use plastics
- ✓ use reusable coffee cups, water bottles and shopping bags

Reuse

- ✓ reuse or repurpose clothing textiles, linen, etc.
- ✓ compost food scraps and garden waste
- ✓ join your local Buy Nothing Facebook group

Recycle

- ✓ buy secondhand
- ✓ buy recycled
- ✓ paper and cardboard
- ✓ plastics
- ✓ tins
- ✓ glass
- ✓ batteries
- ✓ old paint
- ✓ call the WMRC Recycle hotline for advice to help you recycle right

Moving to FOGO

By 2025 the City must introduce a food organics garden organics (FOGO) system. FOGO will be part of a new three-bin waste system designed to divert waste, like food scraps and garden waste from landfill. FOGO waste is collected, processed and made into compost and mulch for use in parks and gardens.

Introducing the FOGO system in the City of Subiaco is expected to divert around 66 per cent of recoverable waste from landfill. This will help the City meet its general waste reduction targets and has other benefits, like reducing water use in our parks and gardens by using more mulch.

The FOGO system has been successful in a number of pilot programs across other Western Australian local governments.

Table 3: Comparison of different bin systems and potential recovery rates.

Developed by Southern Metropolitan Regional Council, based on data from their member local governments.

Bin System	Resources recovered	Typical recovery rate
Two-bin system <ul style="list-style-type: none"> • Green bin – general waste • Yellow bin – recycling PLUS: Green verge collection and hard waste	<ul style="list-style-type: none"> ✓ Recyclables ✓ Bulk verge waste 	33%
Three-bin Garden Organics (GO) system <ul style="list-style-type: none"> • Green bin – garden waste • Yellow bin – recycling • Red bin – general waste PLUS: Green verge collection and hard waste	<ul style="list-style-type: none"> ✓ Garden waste ✓ Recyclables ✓ Bulk verge waste 	48%
Three-bin Food Organics Garden Organics (FOGO) system <ul style="list-style-type: none"> • Green bin – food and garden waste • Yellow bin – recycling • Red bin – general waste PLUS: Green verge collection and hard waste	<ul style="list-style-type: none"> ✓ Food waste ✓ Garden waste ✓ Recyclables ✓ Bulk verge waste 	66.5%

Waste management action plan

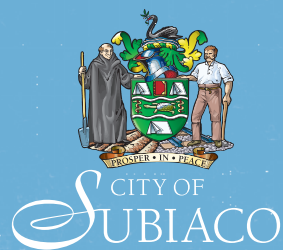
Tool	Action	New or existing	Detailed actions/sub-actions (OR link to existing local government plan/document that details this activity)	Targets		Waste Strategy Objective/s	
				Goal	Year	Avoid	Protect
Waste Services	Investigate the implementation of smaller waste and recycling bins with an associated reduction in waste levies	New	1. Promote 120 Ltr general waste bins option to all residents 2. Provide and promote 120 Ltr recycling bins if required.	Reduce waste per head to 475 kg/pa by 2025	2025	✓	✓
	Initiate pre-booked bulk hard waste verge collection program (Verge Valet)	New	1. Develop a business case detailing preferred service options and specifications, performance measures and implementation plan by September 2020 2. Report to Council for approval		2020	✓	✓
	Undertake bin tagging programs	New	1. Implement bin tagging programme for general waste, GO collection and recycling bins 2. Engage with WMRC regarding education and implementation of programme 3. Display FAQs and information pack on website, provide to staff 4. Identify households chosen for initial bin tagging programme March 2020 (Delayed – COVID-19) 5. Monitor results of tagging programme.	Year on year improvement in the City's recovery rate approaching 67% target by 2025	2021	✓	
	Support WMRC in diverting residual waste from landfill to Waste to Energy (W2E) when possible	New	1. Assist in the waste to energy (W2E) tender process to be awarded on a waste arising basis. 2. Note that residual waste may be diverted to W2E prior to FOGO implementation for a limited period only. Once FOGO is in place only waste strategy compliant residual waste will be diverted to W2E. 3. Improve consistency with W2E strategy targets by introducing FOGO as soon as possible and by the Waste Strategy target of 2025.				✓
	Expanded food organics collection services in multi-unit dwellings and commercial properties	Existing	1. Assess trial program 2. Apply findings from trial to improve full rollout (education, infrastructure etc).		2025	✓	
	Provide FOGO services to single-unit dwellings	New	1. Develop a business case covering preferred service options and specifications, performance measures and implementation plan incorporating State Govt. guidance. 2. Apply for 'Better Bins FOGO' funding 3. FOGO service will be implemented consistent with the Better practice FOGO kerbside collection guidelines		2025	✓	

Tool	Action	New or existing	Detailed actions/sub-actions (OR link to existing local government plan/document that details this activity)	Targets		Waste Strategy Objective/s	
				Goal	Year	Avoid	Protect
Waste Infrastructure	Waste Route Review prior to the introduction of FOGO to ascertain any required changes and/or additional resources and infrastructure	New	Waste pick up route review prior to the introduction of FOGO to ascertain any required changes and/or additional resources and infrastructure: 1. Draft and advertise a Tender detailing, scope, specifications and performance measures. 2. Evaluate Tender submissions, nominate preferred supplier. 3. Engage consultant to review and rationalise all waste collection routes, prior to implementation of FOGO. 4. Complete communication and education programme July 2021.	100% of new collection routes implemented by December 2021	2021		✓
	Improve collection infrastructure in public places and town centre (e.g. solar bins)	Existing	1. Develop and implementation plan for roll out of solar bins by December 2020 2. Monitor performance and efficiency of bins monthly through the following means: – sensors equipped in solar bins that relay real-time data such as bin fill levels to collection staff – reduction of number of bins required – reduction of number of weekly waste collections per bin	20 General Waste solar bins installed by 2025	2025	✓	✓
	Improve public place and town centre collection infrastructure: Source separation in public places	New	1. Allocate budget to install clearly labelled waste bins across the city 2. Develop an implementation plan (including signage and education material) for roll out of waste bins by December 2020 3. Monitor performance and efficiency of bins monthly.	Contamination rates are only 10% in recycling bins by 2025	2025	✓	✓
Policies and Procurement	Develop a Waste Local Law	New	1. Draft a Waste Local Law detailing general duties and responsibilities of residents and the Local Government based on WALGA Model Local Law 2. Draft Waste Local Law to be sent to the Minister for the Environment and the Minister for Local Government and Communities in accordance with the Local Government Act 1995 3. Advertise Waste Local Law for public comment.	Waste Local Law in Place by July 2021	2021	✓	✓

Part seven Waste management action plan

Tool	Action	New or existing	Detailed actions/sub-actions (OR link to existing local government plan/document that details this activity)	Targets		Waste Strategy Objective/s	
				Goal	Year	Avoid	Protect
Data	Improve data collection for illegal dumping	New	<ol style="list-style-type: none"> 1. Identify illegal dumping data needs (including costs), include opportunities to collaborate with State Govt. 2. Liaise with WALGA Reducing Illegal Dumping working group to identify best practice principles 3. Create a standard database for recording illegal dumping incidents and related data across the City 4. Continue to monitor and seek continual improvement of illegal dumping services and data recording where possible. 	Reliable identification data obtained by January 2022	2022	✓	✓
	Clearer separation of commercial and household waste generation rates	New	Investigate effective methods to separate residential waste generation rates and commercial waste generation rates.	Separate waste generation rates by 2025	2025		
	Track the City's waste generation rates	New	Track the City's waste generation rates by tip dockets received from transfer station and processors on a monthly basis.	Reduce waste per head to 475 kg/pa by 2025	2025	✓	✓
	In conjunction with WMRC have signage and community information reflect Waste Sorted and Waste Sorted-approved graphics	Existing	<ol style="list-style-type: none"> 5. Update the City's Waste and Recycling Guide using Waste Sorted graphics 6. Make education material available to residents and businesses using Waste Sorted graphics 	Reduction in waste generation by 10% by 2030, increase in waste recovery to 67% by 2025	2030		
Behaviour Change Programs and Initiatives	In conjunction with WMRC provide programs, initiatives and waste avoidance education to the community	Existing	<ol style="list-style-type: none"> 1. Conduct Waste Watchers Workshops (WWW) and Community tours, talks, events and workshops. 2. Undertake school incursions 3. Provide online community education material including video clips 4. Coordinate with other LGs and RCs to share best practice 5. Provide advice to Member Council officers on behaviour change communications and education 6. Initiate volunteer programs 7. Run recycling hotline 8. Loan low waste equipment to events 9. Use print and digital media for waste reduction and management information (Note these are WMRC actions) 	The waste initiatives, programs and education have contributed to the reduction in waste generation of 10% and recovery of 67% by 2030	2030	✓	
	Reduce the City's use of single-use plastics	New	<ol style="list-style-type: none"> 1. Engage with all key stake holders to identify recommended areas for improvement by January 2021 2. Develop a single use plastic free events policy by July 2021 3. Implement plastic free policy in conjunction with comprehensive education and behaviour change programme by January 2022. 	Single-use plastics have been eliminated at civic events, council events and events held on council-owned sites by December 2025.	2025	✓	✓





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