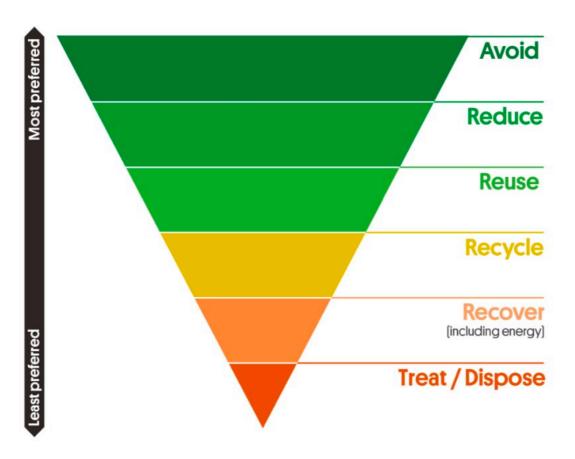




TOWN OF VICTORIA PARK

STRATEGIC WASTE MANAGEMENT PLAN JULY 2024 TO JUNE 2029



The Waste Management Hierarchy

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Prepared for

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Table of Contents

E	Executive Summary	3
1.	1. Introduction	1
2.	2. Decision Making Authorities	3
	2.1 Relevant Legislation and Policies	3
	Table 1 - Summary of Guiding Waste Strategies	4
3.	3. Current Waste Management Services Offered by ToVP	6
4	4. Review of SWMP 2018-2023	7
	Table 2 - Waste Quantity Comparison	7
	4.1 Activities and Achievements	8
	Table 3: Major waste management successes 2018-2023	8
5.	5. Strategic Waste Management Considerations	9
	5.1 Financial Responsibility	9
	Table 4. Waste levy forecast	9
	5.2 Annual Waste Plans	10
	5.3 Waste Data	11
	5.4 Climate Emergency Plan (CEP)	12
	5.5 Mindarie Regional Council	13
	5.6 Waste to Energy	14
	5.7 Service Delivery	14
	5.8 Future Kerbside Collection	15
	5.7 Bulk Waste Collection	16
	5.8 Other Household Wastes	17
	5.9 Contingency Planning	18
	5.10 Public Place Disposal Services	18
6.	5. Community consultation and future direction	20
	6.1 Community Drop-off, Recycling and Reuse (tip) Shop	20
	6.2 Community Education	21
	6.3 Illegal Dumping and littering	22
	6.4 Sustainable Purchasing	23
7.	7. Waste Minimisation Strategy	24
8.	B. Proposed Priority Activities	25
9.	9. Performance Monitoring and Review	26
Α	Appendix 1 - Proposed Priority Actions July 2024 to June 2029	27
Α	Appendix 2 – Actions and Achievements 2018 to 2023	35

Executive Summary

The Town of Victoria Park (ToVP) has operated under a Strategic Waste Management Plan (SWMP) since June 2008, with regular reviews and updates. This SWMP covers the five-year period from July 2024 through to June 2029 and reflects the current direction of ToVP and sets the priority actions for current and future needs.

The aim of this SWMP is to provide the ToVP with the strategic direction to achieve waste management objectives and outcomes, that reflect the waste hierarchy, where waste avoidance is the preferred outcome and waste disposal at landfill is the least preferred.

The objective of this Plan is to further develop the ToVP's waste management systems to deliver best practice services to the community in a social, environmental and financially sustainable manner, whilst striving to achieve the targets set in the *State Government Waste Avoidance and Recovery Strategy 2030* (State Waste Strategy).

The ToVP strategic planning should ideally incorporate the following activities:

- Determine the ToVP and the MRC's current achievements;
- Identify priority areas;
- Define the ToVP and the MRC objectives to address priority issues;
- Define how the ToVP and/or the MRC will achieve the ToVP's desired outcomes; and,
- Continuous improvement cycle to review and assess progress.

From a strategic point of view the ToVP is limited by its financial sustainability to achieve particular priorities in the time set. Financial, environmental and social factors are taken into account in the decision-making process to achieve the outcomes.

The State Waste Strategy was developed with influence from international and Australian Federal strategies, policies, regulations, and guidelines. In WA it sets the waste management targets through to 2030 and drives local government waste strategy through extensive funding opportunities to encourage participation and target attainment.

It is anticipated that there will be increased pressure on local government from the State to strive to achieve the State Waste Strategy targets. The "pressure" may come in the form of waste levy increases and funding incentives to progress down a particular path.

In considering future waste management strategy, the ToVP has several other administrative documents that have degrees of relevance towards waste management within the ToVP, including:

- The Environmental Plan;
- The Climate Emergency Plan; and,
- The Strategic Community Plan.

Following the review of the previous strategic waste management plan, the Environmental Plan 2023 to 2028, the degree of success in achieving the previously proposed activities, discussions with the ToVP, community consultation and based on an understanding of the requirements within the ToVP, this SWMP presents Proposed Priority Actions for the period July 2024 to June 2029.

Major Proposed Priority Actions

2024-2025

- Assess the State Waste Strategy review outcome and possible impact to the ToVP
- Community education on three-bin system, FOGO, Waste to Energy and diverting from landfill
- Review bulk bin verge side collections, including extracting items from the collections
- Continue education of composting and diversion of organic waste

2025-2026

- FOGO education and implementation
- Investigation into the establishment of a recycling and reuse shop

2026-2027

- Review of three-bin system and efficacy
- Investigate the feasibility of installing filtered water bottle refill stations in major public places
- Work with collection contractors to increase the range of materials that can be recycled

2027-2028

- Investigate contingency planning to ensure continuous waste management services taking into account major weather events
- Encourage and monitor sustainable purchasing within the ToVP
- Waste avoidance initiatives with other local governments

2028-2029

- Continuation with carry-over activities from previous years
- Develop a new SWMP for the next five-year period

This SWMP will guide the overall direction and decision making of the ToVP. Over time, this overall direction will be subject to change as there anticipated changes within the waste industry, such as Government direction and funding initiatives, new technology and new waste processing facilities.

A Strategic Waste Management Plan and its actions requires continuous monitoring and review if it is to be effective. This should occur at the end of each financial year so that is aligns with the annual budget. The annual review should include assessment of:

- Achievements against Priority Actions;
- Waste Services expenditure against the annual budget and projected costs likely impact on waste services rates charges over the next 5 years
- Waste collection, recycling and disposal data against previous years (trend graphs);
- Community satisfaction:
- Waste service participation;
- Community volunteer program involvement;
- Complaints/compliments received; and,
- Annual satisfaction survey feedback.

The outcomes of this review will be reported to elected members and any amendments and adjustments would be modified in the SWMP and made available to the public.

1. Introduction

Strategic waste management identifies desirable waste management outcomes that meet community expectations and protect our unique environment from litter and contamination in a financially sustainable manner.

The Town of Victoria Park (ToVP) has operated under a Strategic Waste Management Plan (SWMP) since June 2008. The aim of this Strategic Waste Management Plan is to provide the ToVP with the strategic direction to continue to achieve waste management objectives and outcomes which align with the Waste Management Hierarchy (Fig. 1), the United Nations Sustainable Development Goals and the Towns Strategic Community Plan as indicated below.

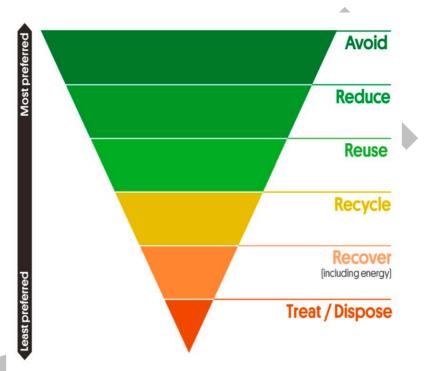


Figure 1: The Waste Management Hierarchy

Sustainable Development Goals

- **2. Zero Hunger.** The ToVP is working towards this goal through its home composting program whereby residents are given the opportunity to attend workshops where they learn how to compost, how to grow home produce with their compost and how to cook healthy meals on a tight budget using leftovers.
- **6. Clean water and sanitation** by pursuing sustainably responsible municipal waste collection and treatment.
- **7. Affordable and clean energy** by diverting general waste from landfill to waste to energy facilities in 2025.
- **11. Sustainable cities and communities** by promoting a circular economy within the Town of Victoria Park and pursuing sustainably responsible municipal waste collection and treatment.
- **12. Responsible consumption and production** through promotion of a circular economy for the Town's visitors, residential and business communities.

Town of Victoria Park

April 2024

Strategic Waste Management Plan

Revision: Public Consultation

Strategic Community Plan:

EN2 Facilitating the reduction of waste through public education and by diverting municipal waste from landfill.

CL1 Effectively managing resources and performance by managing municipal waste in an environmentally, socially and economically responsible manner.

CL3 Accountability and good governance as demonstrated by the SWMP and related reports.

A continuous improvement cycle is built into the SWMP so it reviews past performance against an action plan. It then examines current and future needs to set priority actions to achieve the desired strategic waste management direction for the Town. This SWMP is the latest update and covers the five-year period from July 2024 through to June 2029.

The objective of this Strategic Waste Management Plan is to further develop ToVP's waste management systems to deliver best practice services to the community in a social, environmental and financially sustainable manner, whilst striving to achieve the targets set in the *State Government Waste Avoidance and Recovery Strategy 2030* (State Waste Strategy).

The ToVP strategic planning incorporates the following activities:

- Determine the ToVP and the Mindarie Regional Council's (MRC) current achievements;
- · Identify priority areas;
- Define the ToVP and the MRC objectives to address priority issues;
- Define how the ToVP and/or the MRC is going to achieve the ToVP's desired outcomes; and,
- Continuous improvement cycle through regular formal reviews to assess performance and progress toward achieving our SWMP outcomes.

This document follows these to identify the ToVP's strategic direction.

2. Decision Making Authorities

At an international level, the United Nations Environment Assembly (UNEA), through the United Nations Environmental Program (UNEP), is the world's decision-making body on the environment and international waste management strategies.

The international community, of which Australia is an active participant and contributor, provides Australia with a framework from which to develop a federal approach to strategic waste management.

The Department of Climate Change, Energy, the Environment and Water (DCCEEW) is the primary Federal Government department responsible for actioning waste management strategic direction in Australia.

2.1 Relevant Legislation and Policies

The <u>National Waste Policy - less waste, more resources 2018</u> provides a national framework for waste and resource recovery in Australia.

The *National Waste Policy* endorses the shift to a circular economy and provides a national framework for waste and resource recovery in Australia.

The 2019 National Action Plan presents targets and actions to implement the 2018 National Waste Policy to guide investment and national efforts to 2030 and beyond. The Action Plan also aims to address impediments to a circular economy for waste in Australia, to support businesses and households realise the full value of recyclable materials and work towards more sustainable resource use. The Action Plan aims to:

- Reduce total waste generation in Australia by 10% per person by 2030;
- Achieve an 80% average recovery rate from all waste streams following the waste strategy by 2030;
- Significantly increasing the use of recycled content by governments and industry;
- Phase out problematic and unnecessary plastics by 2025;
- Halve the amount of organic waste sent to landfill by 2030; and,
- Make comprehensive, economy-wide and timely data publicly available to support better consumer, investment and policy decisions.

In response to both international and national waste avoidance and recovery strategies, the West Australian Government has developed the *Waste Avoidance and Resource Recovery Act 2007* (WARR Act) and the *WA Waste Strategy: West Australian Waste Avoidance and Resource Recovery Strategy 2030* (State Waste Strategy) which sets waste management targets through to 2030 and drives local government waste strategy.

The Waste Strategy outlines the State waste management vision of:

"Western Australia will become a sustainable, low-waste circular economy in which human health and the environment are protected from the impacts of waste."

Impacting targets set by this waste and avoidance strategy include:

- o A 20% reduction in waste generation per capita from 2014/15 national levels by 2030
- An increase in material recovery to 75% by 2030, part of which includes all LGA's within the Perth and Peel regions to provide consistent three-bin kerbside collection systems that include separation of FOGO from other waste categories.

Town of Victoria Park

April 2024

Strategic Waste Management Plan

Revision: Public Consultation

The State Waste Strategy also identifies focus materials, which will be the drivers of actions and measurements. These focus materials include:

- Construction & Demolition (C&D) waste by far, the greatest waste stream generated;
- Organic waste food and garden waste;
- Metals steel, non-ferrous metals, packaging and containers;
- Paper and Cardboard office paper, newspaper and magazines;
- Glass packaging and containers;
- Plastics packaging and containers;
- Textiles clothing and other fabric-base materials; and

Table 1 below, provides a list of the common waste management strategic items identified through review of the international, national and state initiatives.

Table 1 - Summary of Guiding Waste Strategies

Description	International	National	State
Waste hierarchy	V	✓	✓
Reduced waste generation	*	✓	
Cleaner production	✓	✓	✓
Circular economy	V	✓	✓
Extended producer responsibility	1	*	
Polluter pays principle	Y	/	✓
Sustainable consumption	V	✓	✓
Education of waste generators	<u> </u>	✓	✓
Plastic pollution	V	✓	✓
E-waste	✓	✓	✓
Climate change mitigation	✓	✓	✓
Limit landfilling	√	✓	✓
Biodegradable waste	✓	✓	✓
Packaged waste	✓	✓	✓
Hazardous chemicals	✓	✓	✓
End of waste criteria	✓		✓
Export bans		✓	
Use of recycled materials		✓	✓
Data collection		✓	✓
Information sharing		✓	✓
Waste infrastructure funding		✓	✓

Town of Victoria Park

April 2024

Strategic Waste Management Plan

Revision: Public Consultation

The Town views compliance with the existing State Waste Strategy as "business as usual" activities. The SWMP provides the Town with guiding principles to achieve its Sustainable Development Goals, Strategic Community Plan and Climate Emergency Plan targets by 2030.

The waste sector accounts for about 2% of WA's Greenhouse Gas (GHG) emissions, almost 90% cent of these emissions resulted from the disposal of solid waste to landfill. In 2018 approximately 85% of the Towns emissions were derived from municipal waste entering landfill.

This SWMP examines ways to reduce emissions generated from waste entering landfill. In so doing, the Town strives to become an exemplar of best practice waste management while working towards a circular economy.

A circular economy presents opportunities for increased local recycling activity. Local solutions create local jobs and minimise the costs and impacts of unnecessary transport.

Overall objectives and state targets

Avoid	Recover	Protect
Western Australians generate less waste.	Western Australians recover more value and resources from waste.	Western Australians protect the environment by managing waste responsibly.
 2025 – 10% reduction in waste generation per capita 2030 – 20% reduction in waste generation per capita 	 2025 – Increase material recovery to 70% 2030 – Increase material recovery to 75% From 2020 – Recover energy only from residual waste 	 2030 – No more than 15% of waste generated in Perth and Peel regions is landfilled 2030 – All waste is managed and/or disposed to better practice facilities

Figure 2: Overall objectives and state targets - Western Australia's Waste Strategy



3. Current Waste Management Services Offered by ToVP

The following is a list of available waste management services provided by the ToVP in 2023:

- Kerbside Waste Collection (red and dark green lid bin), including wet cell car batteries (excluding even vehicle batteries) and 5L used motor oil Weekly;
- Kerbside Recycling Collection (yellow lid bin) Fortnightly;
- Kerbside Recycling Garden Organics Collection (light green lid bin) Fortnightly (small green waste items only), available to all properties >400 m² with the option to opt out, and opt-in option for smaller properties;
- Vergeside Bulk Waste Collection Twice per year;
- Vergeside Green Waste Collection Twice per year. Reduced from three per year in 2023;
- Hazardous Household Waste (HHW) drop-off Once per year;
- Paint drop-off via Paintback By arrangement all year round; and,
- Selected small HHW drop-off Permanent opportunity (ToVP's Administration Centre, Leisurelife Centre and Farmer's Market) receiving dry cell batteries, fluorescent globes, mobile phones, ink cartridges, plastic cards and masks, Library and Aqualife and four schools batteries only.



4. Review of SWMP 2018-2023

As indicated in Table 2 below, the ToVP achieved an overall recycling rate of 30% 2017-18, which fell to approximately 24% by 2022-23. This reduction in recycling was influenced by:

- The City of South Perth no longer allowing ToVP residents to drop e-waste, cardboard, used motor oil, scrap metal, fluoro globes/tubes, batteries, mobile phones, ink cartridges and polystyrene to its recycling centre in 2020 and
- The Mindarie Regional Council's decision to close its Neerabup Resource Recovery Facility (RRF) in August 2021.

If the RRF was still operating, it is predicted the recycling rate for ToVP would have been 74% in 2023.

The COVID-19 pandemic appears to have had a significant effect of waste generation in 2020-21. This decrease in waste generation is thought to have resulted from the lack of international students residing in the ToVP because of its proximity to Curtin University and the University of WA. Western Australia closed its boarders during the Covid pandemic restricting access for international students and foreign workers.

Table 2 - Waste Quantity Comparison

Total Waste Generation – Excluding Commercial Waste				
Davied Ending	30 June 2018		30 June 2023	
Period Ending	Recycled	Landfilled	Recycled	Landfilled
Household Waste (red lid bin)	*1,081t	10,521t	0t	8,939t
Household Recyclables (yellow lid bin)	2,958t	292t	1,933t	681t
Household Recyclables (light green lid bin)	Ot	0t	1,127t	23t
Vergeside Green waste	1,250t	0t	280t	0t
Vergeside Bulk Waste	134t	942t	0t	833t
Non-red lid bin waste to Tamala Park	0t	490t	0t	0t
Public Place bins	0t	180t	0t	322t
Public Place Special Events	0t	0t	No data	No data
Hazardous Household Waste Drop-off	No data	No data	No data	No data
Self-Haul to Drop-off Stations	No data	No data	No data	No data
Sub-Total	5,423t	12,425t	3,340t	10,798t
Total Generation	17,	848t	14,	138t
Percentage Recycled	30	.4%	23	.6%

With the RRF ceasing operation on 31 August 2021, there was no further recycling from the red lid bin.

4.1 Activities and Achievements

A detail analysis of the SWMP 2018-23 actions are listed in Appendix 1. The major successes that were achieved during the SWMP 2018-23 validity period are included in Table 3:

Table 3: Major waste management successes 2018-2023

	T	
Action	Implementation	Outcome
Appointment of a Project Officer responsible for waste	May 2022	Increase community awareness and engagement in waste reduction initiatives like Garden Organics (GO) bin, home composting and the Earth Carers course.
Introduction of the Garden Organics (GO) bin	September 2022	High percentage of households on less than 400m ² properties opted into the scheme, however, collection rates have been less than 2,000 tns per year, which is less than expected. Success saw a reduction in verge collections of organic garden waste decrease from 3 to 2 times per year.
Containers for change	December 2023	Ten cradles, supplied free of charge by the CDS, were attached to public bins within the Town. Yellow lid bins were also delivered to Leisurelife and Aqualife to divert drink containers from landfill. Sporting clubs are given the opportunity to exchange these containers for cash as part of their fundraising activities.
Plastic Free July/Bike month	October 2023	600 metal drink bottles printed with Planet Millen and ToVP logo were donated to Millen Primary School children during bike month to encourage them to use their refillable drink bottles instead of buying drinks, especially when riding their bikes. This will be extended to Lathlain Primary in 2024 as part of
		the Archer Mint protected bike lane project.
FOGO kerbside collection	September 2025	The ToVP will transition from GO to FOGO by the end of 2025. Officers are currently planning for this rollout
Hazardous waste collection	Late October each year.	A highly successful program. ToVP officers will continue to monitor this event to determine if frequency of collection needs to increase to biannual rather than annual collection.
Waste to energy (WtE)	September 2025	Red lidded bin waste will be sent to WtE facilities rather than landfill by mid 2025.
Data collection refinement	May 2024	Officers from the Town will record waste diversion quantities and report on annual waste management activities as part of its continuous improvement cycle.
Bulk waste collection alternatives	No action to date	ToVP Officers will review valet verge collection within the next 5 years

April 2024

Revision: Public Consultation

5. Strategic Waste Management Considerations

Numerous strategic considerations could impact on the ToVP's ability to achieve the State Waste Strategy 2030 and the Climate Emergency Plan (CEP) targets. Some of these are directly within the ToVP's control, while others are dependent on federal and state government directives, other local government decisions and community participation.

5.1 Financial Responsibility

Waste management is a considerable cost to the Town which continues to increase especially if waste is sent to landfill. In 2017-18 waste management services cost the ToVP \$3.94M or approximately \$140/capita. This increased to \$6.24M or \$160/capita in 2022-23, an increase of almost 60%. Using the figures in Table 4 below, the levy increase from \$70 to \$85 in FY2024/25 will represent an increase cost of \$157,000 which will remain until the Town is able to divert its general waste from landfill to waste to energy.

This SWMP will help the Town identify ways to increase resource recovery which currently sits at around 60%. FOGO and waste to energy will reduce the Towns landfill costs, however, waste to energy is expected to cost about the same as landfill (Table 4) and there is a strong desire amongst businesses and residents to build a circular economy within the Town.

Financial Year	Levy Rate to Take Affect	Levy Rate Per Tonne	
2023–24	1 July 2023	\$70	
2024–25	1 July 2024	\$85	
2025–26	1 July 2025	\$88*	
2026–27	1 July 2026	\$90*	
2027–28	1 July 2027	\$93*	

Table 4. Waste levy forecast.

The waste levy is applied as a disincentive for waste entering landfill especially in light of the state government target of 85% reduction in waste entering landfill by 2030. The upcoming review of the State Waste Avoidance and Resource Recovery Strategy 2030 will consider progress against the State Waste Strategy's targets and provide advice on further initiatives which may be needed to accelerate the 85% landfill reduction target. According to Andrew Beckman, Construction and Demolition Health and Safety Community and Sustainability Manager for Cleanaway NSW, landfill levies provide a significant positive behavioural change. *High landfill levies lead to new and emerging opportunities to improve product stewardship and encourage a circular economy* (Inside Waste Apr/May 2024). Itemising the cost of waste management for residents and businesses alike would introduce a polluter pay system and introduce polluter and therefore producer and consumer incentive to reduce the generation of waste.

^{*} The need for further increases will be considered as part of the 2023 review of the State Waste Strategy.

Town of Victoria Park

April 2024
Strategic Waste Management Plan

Revision: Public Consultation

To ensure adequate foresight and transparency in future waste service charges, ToVP should develop a long-term financial waste services budget that provides a framework for residents and businesses from which to forecast future waste management costs and drivers to support sustainable waste management, a circular economy and ultimately net zero emissions by 2030.

Act	Action Items		
1	Develop a long term (5-10 year) waste services budget		
2	Determine how rate payers, multi-unit dwellings (MUD's) and commercial business will be serviced and then appropriately charged for these services.		
3	Use this waste services budget to determine the indicative future waste services rates charge to rate payers and businesses.		
4	Identify key drivers that are likely to impact on the future cost of waste management and develop strategies to minimise the financial and reputational risk.		

External Funding

The Waste Authority is the primary source of grant funding and sets out an annual business and action plan which provides "seed funding" to encourage the establishment of a waste management activity, such as a repair café, within a community which is managed by the LGA or a community organisation.

Officers from the ToVP should monitor the availability of funding sources and the outcomes sought by the funding suppliers to establish new waste management initiatives that divert waste from landfill and fulfil community needs and expectations.

Acti	Action Items		
1	Monitor available sources of external funding		
2	Where appropriate, adjust the timing and scope of waste management service and activities to suit available external funding sources		
3	Apply for external funding when available		
4	Encourage and assist the community in applying for external funding when available		

5.2 Annual Waste Plans

The Department of Water and Environmental Regulation (DWER) introduced the requirement for all local governments to develop a Waste Plan by September 2020, and report annually (financial year) on the implementation of the endorsed Waste Plan.

In September 2020, the ToVP developed a DWER endorsed Waste Plan that:

- Aligned local government waste management activities with the State Waste Strategy 2030;
- Mapped current performance and established a benchmark to achieve State Waste Strategy targets;
- Monitored progress on local government achievement of State Waste Strategy targets; and,
- Designed programs and activities which supported the implementation of a waste plan.

Town of Victoria Park April 2024 Revision: Public Consultation

Strategic Waste Management Plan

The accuracy and consistency of the ToVP's annual reporting on the implementation of the ToVP's Waste Plan is critical in ensuring the Towns achievements are accurately compared against the aggregated metropolitan and state-wide waste management statistics.

Improved data recording and reporting has consistently been a Waste Authority Annual Action Item over the past five years. The accuracy of the ToVP's data collection and reporting is an important tool for ToVP and the DWER/Waste Authority to track the Towns progress against its own strategic waste management planning and the State Waste Strategy.

Act	Action Items		
1	Focus on accurate waste data recording and consistent reporting		
2	Use waste data and primarily data trends, to assess achievement against the ToVP's and the State Waste Strategies		

5.3 Waste Data

Accurately measuring the success of the Towns waste strategy can be achieved by:

- Monitoring community satisfaction through workshops, surveys and customer complaints,
- Carefully recording waste and resource recovery data supplied by our service providers,
- Monitoring the cost of service delivery and anticipating rising costs like the landfill levy (Table 4).

Typically, community satisfaction is based on the convenience and efficiency of the individual waste services being offered by the ToVP with cost of services being less of a concern. This could be attributed to these costs traditionally being part of a general rate charge rather than an itemised list of charges as suggested in section 5.1.

The accumulation of accurate waste and financial data is critical in managing the ToVP's waste services and reporting requirements. The financial data collection and reporting has been well established and achieves the ToVP's financial and statutory requirements. Waste data recording and reporting needs to be accurate and consistent if the Town wants to build a continuous improvement cycle into its waste management strategy and budget.

The ToVP needs to develop a single database containing all previous year's data and is progressively developed over time. This single data set should include trend tables or graphs to clearly show how the individual waste streams are changing over time and include notes as to why there is a particular change in the data trend, such as the closure of the Neerabup RRF, COVID-19, or the introduction of FOGO.

Once the data has been collated, ensure that the reporting is accurate and compare this with recent historical data to identify unexplained stepped trend changes that could indicate errors in the data or reporting.

Town of Victoria Park

April 2024

Strategic Waste Management Plan

Revision: Public Consultation

Acti	Action Items		
1	Work with service providers to ensure that the most accurate data is obtained		
2	Focus on accurate waste data recording and consistent reporting		
3	Develop a comprehensive dataset of historical waste data, including notations of events that have influenced changes in data trends		
4	Compare recent historical data to identify any unexplained stepped changes, which could indicate errors in the data or reporting		

5.4 Climate Emergency Plan (CEP)

In July 2021, the ToVP developed a comprehensive Climate Emergency Plan that outlines the ToVP's strategies to mitigate and adapt to the impacts of a changing climate, with an aim of generating net zero carbon emissions by 2030. This is an aggressive target in comparison to the State Climate Change Bill that sets a target of net zero emissions by 2050.

The CEP encompasses a range of strategies and initiatives to achieve the net zero emission targets, most of which focus on municipal waste which accounted for 85% of emissions in 2018/19. Waste, particularly organic waste, trapped in landfill generates potent greenhouse gases like methane which is 25 times worse than CO₂. Simply diverting organic waste from landfill through the FOGO, waste to energy and home composting initiatives will have a significant impact on the ToVP's carbon emissions.

In accordance with the CEP, the following waste management related strategic actions need to be achieved:

- Implement FOGO to all households by 2025;
- Target a minimum of 50% diversion of organics from landfill by 2030;
- Target a minimum of 50% diversion of paper and cardboard from landfill by 2030;
- Implement methods of efficient and minimised waste disposal for other items to target a minimum of 50% diversion of other materials from landfill by 2030;
- Support and educate the community:
 - Continue to provide community education on how to reduce landfill waste and improve recycling;
 - o Promote the use of established platforms and tools that encourage energy and waste reduction and sharing of resources;
 - Investigate the opportunity to provide subsidies, products or similar to support organic waste recycling at home;
 - Investigate the opportunity to provide an incentive-based mechanism for residents to reduce their waste footprint;
- Support and educate businesses:
 - Extend community education on waste and recycling to businesses, highlighting the economic benefit for waste minimisation;
 - o Investigate the opportunity to provide subsidies to support organic waste recycling for businesses to reduce landfill waste; and,

Town of Victoria Park April 2024 Revision: Public Consultation

Strategic Waste Management Plan

Investigate the opportunity to provide an incentive-based mechanism for businesses to reduce their waste footprint, including a recognition/reward program for businesses that are using energy efficient and sustainable practices.

Acti	Action Items		
1	Implement a FOGO collection system to all households by 2025. This is currently in the planning stage.		
2	Diversion of the red lid bin from landfill to WtE is due to commence by 2025		
3	Continue with community education workshops aimed to reduce food waste and organics entering landfill as well as the garage sale trail and cloth nappy workshops. Explore other education workshops to reduce consumption and waste.		
4	Business community education to reduce waste and power consumption including the implementation of FOGO collection for commercial MUD's and the hospitality industry.		

5.5 Mindarie Regional Council

The MRC is a regional council that was set up primarily as a waste management organisation for seven member councils, namely:

- Town of Victoria Park;
- City of Perth;
- City of Vincent;
- Town of Cambridge;
- · City of Stirling;
- City of Joondalup; and,
- City of Wanneroo.

The MRC provides the Town with:

- A secure landfill disposal option through to 2028 (anticipated landfill closure date);
- Joint tendering for WtE disposal;
- · Access to substantial funding from the Waste Authority as a result of the large metropolitan population represented by the MRC; and,
- Possible future large-scale waste facility processing capacity or joint tendering opportunities.
- Consortium of Regional Educators for Waste (CREW) membership which allows collaboration and the sharing of ideas and resources, including a Plastic Free July CREW membership.

With the closure of the Neerabup RRF, the diversion of waste from landfill and the anticipated closure of Tamala Park in 2028, the ToVP will have minimal reliance on the MRC for its waste disposal. The ToVP ongoing involvement with the MRC should be reviewed, based on a comparison of the participation cost verses current and likely future advantage.

The MRC owned and operated infrastructure is located in the City of Wanneroo therefore providing limited benefit to ToVP residents as a recycling drop off and resale centre.

Acti	Action Items		
1	Progress with diverting waste disposal from landfill to WtE		
2	Progress with the implementation of a FOGO collection system		
3	Assess the future value of remaining a member of the MRC		

5.6 Waste to Energy

There are two large-scale Waste to Energy (WtE) facilities nearing completion in Kwinana and East Rockingham. Once operational, the two facilities will receive 700,000 tonnes of waste per year which will halve the 1.4M tonnes of municipal, commercial and industrial waste currently going to putrescible landfills (Class II and III landfill).

The Mindarie Regional Council is well progressed with negotiations for its member councils to dispose of waste at one of the WtE facilities by 2025. Once operational the ToVP will immediately achieve a recycling rate in excess of 90% and a significant reduction in its carbon emissions.

Anecdotal evidence indicates the cost of WtE will be similar to the current haulage and landfill disposal rate for ToVP. Environmentally, WtE is one rung higher than landfill disposal in the waste hierarchy and importantly, there will be no landfill gas generation. Filters will limit the amount of gas, especially toxic gas, that is emitted to the atmosphere during incineration.

Further savings both financially and environmentally could be achieved if a suitable 'local' waste transfer station was available to the Town. Such a service would allow residential waste collection trucks to transfer their waste collections to a large capacity haulage vehicle rather than smaller trucks travelling to the WtE facilities in Rockingham or Kwinana.

Acti	Action Items		
1	Maximise the diversion of processable waste materials (red lid bin waste) and verge waste to the WtE facility		
2	Examine the possibility of sharing a transfer station facility with other councils and/or the waste collection contractor.		



5.7 Service Delivery

The Town must consider cost and efficiency when securing waste management services. Prior to tendering future waste management services ToVP must review its current waste management practices and service providers. The Town needs to secure services that will increase the range of materials that can be recycled at a competitive price. The transition to WtE and FOGO by 2025 provides the Town with an immediate opportunity to examine its waste management services and source viable alternatives like a transfer station, a tip shop and valet bulk waste collections.

Acti	Action Items		
1	Examine ways to increase the range of materials that can be recycled		
2 Approach other LGA's and Universities to share ideas and resources like a transfer station			
3	Consider combining different services into a single contract to potentially achieve more competitive pricing or opening the service to a wider range of service providers		

5.8 Future Kerbside Collection

The Town currently has a three-bin kerbside collection system incorporating an organics bin (light green lid bin), a recycling bin (yellow lid bin) and a general waste bin (red lid bin) for properties greater than 400m² and residents residing on less than 400m² who have nominated to have a third organics bin. A three bin system will be mandatory for all residents by the end of 2025 when FOGO and Waste to Energy (section 5.6) are implemented. Once implemented, FOGO will be collected weekly while the general waste bin will be collected fortnightly.

The diversion of garden organics from landfill (GO) and eventually food organics (FOGO) provides the community an opportunity to divert organic waste from landfill, reduce their greenhouse gas emissions and contribute to the circular economy. Currently GO contamination is 1-2%, but there are instances where this contamination is so significant the truck load of GO must be diverted to landfill. FOGO contamination tends to be higher with other LGA's reporting contamination rates of up to 5%.

When ToVP transitions to a FOGO collection system in 2025, there will be a focused community education campaign around the correct segregation of waste and the new bin collection frequency.

The long-standing yellow lid recycling bin service is well accepted by the community and continues to achieve significant recycling results.

The collected material is aggregated at the materials recovery facility (MRF) in Guilford, operated by Cleanaway which is the Towns current recycling collection and processing contractor. Based on recent recycling data received from Cleanaway, there is an average of approximately 75% recyclable materials in the yellow lid bin, with 25% of the content of the bin being waste residue that goes to landfill which equates to 2000 tns/year of missed recycling opportunity.

Town of Victoria Park

April 2024

Strategic Waste Management Plan

Revision: Public Consultation

This waste residue is a mix of non-recyclable materials, recyclable materials that are not able to be sorted by the processing facility or a recyclable material that is not extracted by the process because there is no downstream market. While this 'contamination' is currently sent to landfill, and WtE in the near future, it is a wasted resource that should contribute to the circular economy. Effective education, penalties for non-compliance and the diversification of recycling services must be investigated and implemented.

A Bin Tagging Program has been developed by the Waste Authority to provide direct feedback to the residents on the content of their kerbside bins (all three bins) by placing a tag on each bin to indicate if the contents of the bins are appropriate. Specific feedback on the contents of each bin as well as some general guidance on the correct segregation of waste is provided on the tags.

Penalties should only be used in circumstances where bins are repeatedly observed with severe contaminated and previous education efforts have been unsuccessful.

Acti	Action Items		
1	Progress with the implementation of a FOGO system by mid-2025		
2	Implement a community education program focused on the new FOGO and WtE collection system.		
3	Provide education campaigns that drive the correct segregation of waste, this will include fridge magnets and QR codes linking to the Town's website.		
4	Use the bin tagging program to monitor bins for 4 weeks in each suburb once FOGO and WtE have been introduced.		
5	Review the effectiveness of the bin tagging program and consider a second program in 6-12 months of the first.		
6	Take advantage of the camera system on the waste collection trucks to notify council officers of highly contaminated bins and act accordingly.		

5.7 Bulk Waste Collection

Currently the Town offers two rounds of bulk waste verge collection and two rounds of bulk garden organics per year. Residents stockpile bulk waste or garden pruning's on the verge which is then collected by contractors. Reusable items are salvaged by members of the public but there is concern this contributes to the incidence of theft from 'inside the gate' deeming the service unpopular with some residents (anecdotal evidence).

Some metropolitan LGA's have implemented an on-demand bulk bin system. Cost savings associated with less demand are a major benefit to LGA's but there is limited opportunity for the public to collect and repurpose this waste, so it is diverted to landfill. Inner city LGA's, including ToVP, have high density housing and simply do not have the verge space to implement a bulk bin system.

The Town is currently investigating alternatives to bulk waste collection by working in partnership with charities and other LGA's to repurpose materials such as clothing and e-waste. Waste to Energy disposal will provide the opportunity for non-recyclable kerbside waste material to be disposed of at a WtE facility.

Action Items		
1	Review effectiveness of the current bulk waste verge side collection service and seek alternatives if and where appropriate	
2	Work with charities, other LGA's and waste collection service providers to recycle and repurpose bulk waste collection items	
3	Work with service providers to divert waste items to WtE facilities instead of landfill	

5.8 Other Household Wastes

Some domestic waste cannot be disposed of in existing waste collection systems because of their toxicity and/or volatility. Such items include household paints, e-waste, batteries, aerosol cans, construction materials and asbestos.

Electronic or "E-waste includes, but is not limited to, televisions, computers, mobile phones, kitchen appliances and white goods. With the world becoming more automated, the range and quantity of e-waste has and will continue to increase exponentially.

Large electrical items or white goods are collected as part of the bulk waste collection scheme, smaller items like mobile phones, computers, fluorescent tubes and batteries can be delivered to community drop off centres like OfficeWorks, Apple stores and the ToVP administration building. Demand for these services will increase as the State Government ban on e-waste entering landfill comes into effect.

Lithium batteries which are common in e-waste are a particularly difficult waste stream to manage. Small lithium batteries commonly found in toys, e-cigarettes and mobile phones are extremely hazardous when placed in the kerbside collection bins. Lithium batteries are responsible for fires in waste collection trucks as are aerosol cans. Both are now considered to be hazardous waste.

The Town offers an annual hazardous waste collection day which is well patronised by the community. Residents can dispose of their batteries and aerosol cans as well as household paints, oils, gas bottles, pesticides and other toxic chemicals. An annual service is sufficient at present but demand for this service may warrant a biannual service in the future.

Actio	Action Items		
1	Implement local solutions for the drop-off and/or collection of e-waste and examine the viability of a designated e-waste verge collection service.		
2	Monitor response to the hazardous waste collection day to see if more services are required		
3	Include e-waste and aerosol can disposal opportunities in future community education activities		
4	Use the QR code facility to inform public of changes to kerbside and hazardous waste collection.		

5.8.1 Inert waste

Inert waste such as building rubble has no current disposal solution within the Town. Residents are expected to take this material to a waste drop-off facility located within other local government areas, the nearest being 20 km from the centre of the ToVP. The majority of residents are likely to simply place small amounts of inert material into the kerbside red lid bin, on a weekly basis, until all of their inert waste has been collected.

With the immanent commencement of WtE disposal, inert waste should not be sent to these facilities, as it has no calorific value and can damage the plant processing equipment.

The ToVP should consider providing a local drop-off facility that is convenient for the community and ideally diverts this waste to road base.

5.9 Contingency Planning

Extreme weather events are becoming more frequent with a warming planet. The ToVP must consider the impact of extreme storm events on existing waste management services. Strong wind events and flooding will place extra pressure on regular waste services in terms of access and tonnage. The demand for bulk verge collections is also likely to increase. The Town needs to plan for such events.

Action Items

- Consider the impact and contingency planning in the event of extreme weather which may directly impact the Town and/or disrupt regular waste collection.
- Develop a brief contingency plan setting out actions to be undertaken in the event of such an occurrence

5.10 Public Place Disposal Services

The ToVP currently provides public place general waste disposal bins with limited recycling bins because of contamination. The bins are effective for reducing litter but not waste segregation. Given the success of the Container Deposit Scheme (CDS) - Containers for Change baskets, which were installed in late 2023, the Town should consider purchasing extra baskets to expand the service beyond the 10 baskets provided by the CDS. If the public are receptive to the CDS scheme, the Town should consider installing recycling bins in public places.

Two 240L recycling bins have been placed at Aqualife and Leisurelife so people can dispose of their drink containers. Sporting clubs are invited to collect these containers as a fundraiser and there is public interest in providing the 3-bin system and education at various sporting facilities within the Town.

In late 2023, the ToVP provided waste and recycling bins at two of its public events, which proved successful from a community education and participation point of view. Waste segregation with ushers to guide people how to correctly segregate and dispose of their waste should become part of the event organisation. It trains the public about the correct segregation of waste and reduces landfill costs for the Town.

Public education and careful monitoring by the Town during litter clean-up activities will help identify litter hot-spots and the type of rubbish being left. This data will help inform ToVP as to what type of bins to install if any.

Town of Victoria Park April 2024 Revision: Public Consultation

Strategic Waste Management Plan

The location of additional waste bins along the Swan River frontage and in particular popular fishing spots, would complement the Department of Biodiversity, Conservation and Attractions' Plastic Free Riverpark, Reel It In and River Guardians programs.

Action Items

- Monitor litter generation and install additional public place waste and recycling bins if necessary, especially along the foreshore
- 2 The ToVP should utilise public recycling bins at all public events



6. Community consultation and future direction.

A community consultation session was conducted in late 2023 to understand what the community expected from the ToVP in terms of waste management and the circular economy.

Community discussion focused on the need for:

- A dedicated education facility which informed and incentivised the community to minimise waste generation and repair, reuse and repurpose what they have;
- The establishment of a Sustainability Hub to include a reuse shop, repair café and recycling drop off point for batteries, light globes, aerosol cans etc.
- Bin stickers on bins to identify input material "do's and don'ts";
- Education officer to be easily accessible;
- Dedicated Facebook page to provide knowledge on what to do correctly, including ability for an online chat;
- Increase the visibility of composting (and other recycling activities);
- Dedicated bins for collection of blister packs (pill packs) placed in public places;
- Visual displays and aids to resolve language issues, including clear bins for some items such as bottles and lids, so that the content is clearly visible; and,
- Increased number of bins in public places for recycling a wider range of recyclable items.

6.1 Community Drop-off, Recycling and Reuse (tip) Shop

Developing a small community sustainability and recycling hub provides a convenient and cost-effective one-stop-shop for the community. Ideally the hub would focus on community engagement and education and would incorporate:

- Waste and recyclable material drop-off facility (for waste items identified in the SWMP as requiring special drop-off or collection action);
- Community education focused on reduce, reuse, recycle and repurpose;
- Community industrial kitchen for cooking with leftovers and excess produce workshops;
- Reuse shop with access to free quality clothing for the needy and homeless;
- Repair lab including workshops in basic tool use and repair;
- Composting displays, demonstrations and share waste facilities;
- Expansion of the community garden including chickens to demonstrate composting and the circular economy.

Being an inner-city municipality, the Town has limited space available for such a facility which is also a problem faced by neighbouring MRC members. The Town is currently exploring the option of partnering with councils outside of the MRC that are within a short driving distance to ToVP.

6.2 Community Education

The ToVP has hosted a range of waste education activities since the appointment of a Waste Education Officer in May 2022. Initially engaged in informing the public about the implementation of the new kerbside collection service and a third waste bin, education has expanded to incorporate sustainability and the circular economy.

Preparing the public for the new Garden Organics (GO) system and nationwide bin lid colour system (red, yellow and green) involved information sessions at the library, farmers market and public events. Community engagement emphasised the desire for a food organics (FO) waste stream until the rollout of FOGO in 2025.

After consultation with the City of Bayswater, who have successfully run home composting workshops for a number of years, and local sustainability business, Urban Revolution, who also run composting workshops, ToVP ran its first home composting workshop in February 2023. These workshops are held every 2 months with participation increasing through word of mouth and advertising on the Towns website and social media.

Attendees participate in a 2.5 hour workshop which is free to ToVP ratepayers. External community members are charged \$25 which is paid directly to Urban Revolution who deliver the education program. Participants learn the principals of composting and are introduced to Bokashi buckets, worm farms, hot and cold compost systems. These are interactive workshops where participants are encouraged to ask questions and explore the best composting system to suit their needs.

At the end of the session participants are asked to complete a survey and are invited to join a closed Face Book page, run by the waste Education Officer, where they find support and tips for composting and using excess produce. The site is also used to promote future waste education events.

Ratepayers are given a \$100 voucher to purchase the composting system of their choice from Urban Revolution. This requirement guarantees a quality product, supports a small local business and simplifies payment to our service provider who record the number and type of systems purchased. In return, ratepayers are asked to weigh and record how much food waste they are diverting from landfill to their system(s) each week for a maximum of 8 weeks.

Participants are invited to a second workshop held every alternative month at the community garden. In this workshop participants explore cost effective ways to upscale their composting system and how to garden with their compost. Attendees are asked to complete a second survey which is then collated with the first survey and waste tally sheets to monitor the success of the program.

While participation in the second workshop is significantly less than the first, extrapolation of data indicates that if 80 households each divert 1kg of food waste from landfill each week, they will save 24 cubic meters of greenhouse gases being emitted to the atmosphere. These preliminary results indicate the significance of the home composting initiative to the ToVP achieving net zero emissions by 2030 in addition to the reduced carbon miles associated with waste collection and food production if people grow some of their own produce.

Future workshops will focus on Plastic Free July, cooking with leftovers and excess produce and the Earth Carers Course, a 6 week course which examines waste segregation, sustainable living and the circular economy. A lunch and learn session was held for staff to teach them how to use the Bokashi Bin system which were introduced into the staff lunchrooms in the Administration Building in April 2024.

Strategic Waste Management Plan

Financial Year 2024/25 will see a strong emphasis on education around the FOGO and waste to energy rollout. Residents will need to have a clear understanding of how to use the new bin system and the collection timetable. Image based fridge magnets, the Waste Calendar and a new QR code system will inform the public of the correct segregation of waste and waste collection centres. The QR code will connect to the Towns Website which will be regularly updated with any changes to the recycling system and the recycle right website. The website will also have access to translation apps for common languages other than English.

Action Items Continue with the home composting initiative, build on the range of related workshops to reduce 1 food waste and provide annual reports to monitor the success of the program. Continue active involvement in Plastic Free July through joint membership with the MRC. 2 Continue to utilise the Town's website as the primary communication method with the community 3 Where practical, include visual illustrations and images in the community communication material to 4 improve communication with reading-impaired and non-English speaking portions of the community Develop the QR code system that links to the Towns website where people are informed of the latest 5 information about recycling and collection centres for items not collected in the kerbside bin system Actively promote the Recycle Right website and app through the Towns website 6



6.3 Illegal Dumping and littering.

Illegal dumping is an on-going issue within the Town with ToVP spending an estimation of \$80,000/year on the cleanup and disposal of litter and illegally dumped materials within its municipality over the past five years. The source of a lot of illegal dumping is thought to be university students who dump unwanted furniture in public places, especially empty blocks and laneways. The ToVP also has education patrols by rangers in littering and dumping hot spots.

The ToVP, through its safety initiative programmes is proposing to purchase a mobile CCTV trailer which will be used near dumping hotspot areas as a deterrent tool and also has recording capabilities to assist rangers to fine/prosecute offenders. Education and Environmental officers will also approach the university about organising a buy nothing page or reuse shop to encourage repurposing rather than dumping unwanted furniture by students.

Cleanup activities have primarily been carried out through the national Keep Australia Beautiful Illegal dumping and litter prevention program. Included in the program is a Help Stop Illegal Dumping Guide for Apartment and Strata Building Managers and Residents.

The ToVP is also an active promoter of the "Adopt-a-Spot" initiative run by Keep Australia Beautiful WA and encourages the community to adopt and maintain a local area by collecting litter and reporting illegal dumping. The program provides free resources, insurance coverage and recognition to the community. This is an effective way to involve the community in small-scale waste management activities, that have a real, visual impact on the local area.

Action Items 1 Continue with an active campaign of education, warning, prosecution and cleanup of litter and illegal dumping 2 Work with Curtin University and UWA to encourage students to rehome unwanted furniture.

6.4 Sustainable Purchasing

The ToVP has a responsibility to lead by example in sustainable waste management practises, including the purchase and consumption of sustainable products. Ideally, purchasing of products that generate minimal waste are preferred to items made of recycled or recyclable materials. Where possible locally manufactured goods should be given preference to reduce carbon miles and stimulate the local economy.

The Towns current purchasing policy includes Sustainable Procurement and Corporate Social Responsibility. This portion of the policy encourages the purchase of products that can be refurbished, reused, recycled and/or reclaimed. Priority should also be given to manufacturers that demonstrate reduced packaging and waste generation during manufacture.

As part of the ToVP's continuous improvement in sustainable waste management, Sustainable Procurement and Corporate Social Responsibility should be actively encouraged and monitored to ensure sustainable purchasing is undertaken by the whole organisation.

Action Items		
1	Sustainable purchasing should be endorsed for all procurement where feasible.	
2	Consider working towards ISO 14001 accreditation standards as recommended by external auditors when looking at the Towns Environmental Plan	

7. Waste Minimisation Strategy

Town of Victoria Park is obligated to provide a general waste disposal service to the community, all other services provided by the ToVP are discretionary. Key drivers that influence the waste management services provided by the Town and the MRC include:

- Federal and State Government direction;
- Essential services:
- Community needs and aspirations;
- Environmental considerations; and,
- Financial implications.

Community acceptance and financial constraints are the two most significant factors determining the type of waste services ToVP provides. Environmental factors are becoming increasingly significant as State and Federal Governments legislate to divert waste from landfill to reduce emissions, encourage a circular economy and minimse contamination of land and groundwater by hazardous substances.

Many local governments within the Perth Metropolitan area have adopted the 70% waste diversion from landfill by the end of June 2030 as the benchmark of success even though it is not a regulatory target. The Town is aiming for zero emissions by 2030 to align with its Climate Emergency Plan. Given municipal waste contributed 85% to these emissions in 2018 responsible waste management within a circular economy (Fig. 3) is a prerogative.

This SWMP has demonstrated the link between municipal waste and carbon emissions. The environmental, social and economic need for responsible waste management at an international and national level will impact the Town. The ToVP needs to be aware of legislative changes and community expectation. Effective strategic waste management planning must have clear direction and a continuous improvement cycle to guide the decision-making process and action plan.



Figure 3: Circular Economy

8. Proposed Priority Activities

Following the review of the:

- Strategic Waste Management Plan, 2018-2023,
- Environmental Plan 2023 to 2028,
- Climate Emergency Plan
- Strategic Community Plan
- Sustainable Development Goals, and
- Public Consultation,

the Proposed Priority Actions for the period July 2024 to June 2029 are presented in Appendix 1 below in the order of priority. Various actions were identified at the end of subsections in sections 5.1-5.12 and section 6 above.

The proposed Priority Actions are listed in order of priority and spread over a 4 year period with the fifth year being left for development of the next 5 year plan. The potential timing of the proposed Priority Actions is simply a guide because State and Federal priorities regarding waste are likely to change and have direct impact on LGA's. This will impact prioritisation of actions to suit the changing waste management environment.



9. Performance Monitoring and Review

A Strategic Waste Management Plan and its actions requires continuous monitoring and review if it is to be effective. This should occur at the end of each financial year, so it aligns with the annual budget. The annual review should include assessment of:

- Achievements against Priority Actions;
- Waste Services expenditure against the annual budget and projected costs likely to impact on waste services rates charges over the next 5 years;
- Waste collection, recycling and disposal data against previous years (trend graphs);
- Community satisfaction:
 - Waste service participation;
 - o Community volunteer program involvement;
 - o Complaints/compliments received; and,
 - o Annual satisfaction survey feedback.

The outcomes of this review should be reported to Elected Members and the community, and the SWMP actions adjusted accordingly.



April 2024 Revision: Public Consultation

Appendix 1 - Proposed Priority Actions July 2024 to June 2029

No.	Action	Details/Comment	
Ongo	Ongoing and Continuous Waste Management Actions		
From	<u> Strategic Waste Management Plan 2</u>	018 to 2023	
A	Continue with community education focused on increasing participation and efficiency of existing recycling systems.	 Improve efficiency and expand the coverage of existing systems to increase waste diversion from landfill. Incorporate discussion/agreement with service providers to increase the range and/or scale of existing service and/or community education to better utilise the existing services. Examples being: Targeted and continuous education campaign to ensure correct segregation oof wase by householders and businesses to minimise contamination and the risk of waste being sent to landfill. Consider bin tagging as a means of improving bin utilisation and reward those that segregate correctly. QR codes distributed to ratepayers with waste calendar. QR code links to most recent recycling information including recycle right and info-graphics. Encouraging the uptake of larger yellow lid bins (360 L) or bin sharing between residents if needed as opposed to placing overflow recyclable materials in the red lid bin once the yellow lid bin is full; Increased promotion of Hazardous Household Waste (HHW) collection days; and, Install additional small item recycling stations at shopping centres, schools, post offices, police stations and larger office complexes etc. (batteries, fluoro globes, mobile phones, ink cartridges and other small items). Anticipated Cost – Waste education activity. No additional cost. Cost included in existing Waste Services budget. 	
В	Annual in-house review of this Strategic Waste Management Plan	ToVP's waste management team to review Proposed SWMP Activities for the financial year to assess the Proposed Activities for the following year. Ideally this review will include a comparison of the current waste diversion rates achieved against the previous year's achievement and the ToVP's strategic policy benchmark targets (State Waste Strategy target). A brief report should be presented to Council to update ongoing waste management activities within the ToVP. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. External review (if required) \$10,000 per review.	
С	Develop a QR code that links to website	Comms team to work in collaboration with waste team to update website and annual waste calendar as necessary to inform the community of relevant waste management activities and recycle right website. Update the education material to include relevant waste management issues. Anticipated Cost – Waste education activity. No additional cost. Cost included in existing Waste Services budget.	

April 2024 Revision: Public Consultation

No.	Action	Details/Comment		
Ongo	Ongoing and Continuous Waste Management Actions			
From	Strategic Waste Management Plan 2	018 to 2023		
D	Continue to provide collection facilities for dry cell batteries, and light globes, mobile phone and printer cartridge recycling.	Increase the drop-off locations and range of small problematic waste materials such as aerosol cans and coffee pods. Schools could become drop-off locations for selected materials as part of their WasteSorted Schools program. Anticipated Cost – Ongoing activity. No additional cost. Cost included in existing Waste Services budget.		
E	Continue to use the ToVP's street tree pruning's as mulch for landscaping and environmental restoration projects.	This will need to be reviewed on a case by case basis and the infestation of trees by the polyphagous shot-hole borer. Anticipated Cost – Ongoing activity. No additional cost. Cost included in existing Waste Services budget.		
F	Continue community waste- oriented education programs.	Educate and support the community in small-scale waste elimination and minimisation activities such as the Garage Sale Trail and the cloth nappy rebate. Further community education activities are outlined in A above; Anticipated Cost – Waste education activity. No additional cost. Cost included in existing Waste Services budget.		

Annı	nnual Waste Management Actions		
Year	ear 1 – July 2024 to June 2025		
1.1	Assess the State Waste Strategy review outcome and the possible impact to ToVP.	The State Waste Strategy - West Australian Waste Avoidance and Resource Recovery Strategy 2030 is currently under review, with the outcome anticipated to be announced in early 2024. The ToVP should assess the outcome of the review to confirm whether there are any changes required to this SWMP. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. External review (if required) \$5,000 to \$10,000.	
1.2	Focused community education on the impact of the Waste to Energy (WtE) disposal option	ToVP will be moving to WtE by mid 2025. A targeted education campaign is required to improve community understanding of what and what not to put into the red lid bin, including the clearly defining of non-processible waste materials. Anticipated Cost – Waste education activity. Additional cost associated with promotional material. \$50,000.	
1.3	Work with community groups and charity organisations to identify opportunities to extract reusable items from the bulk verge waste prior to collection.	Historically, kerbside "scavenging" has resulted in the removal of some reusable materials prior to bulk waste collection. ToVP should: • continue to investigate how and where to develop sustainability hub that includes a 'tip shop' for suitable items that would otherwise be place on verge side collections or illegally dumped. • increase community and/or charity organisation involvement to remove reusable materials. Anticipated Cost – Waste education activity. Cost of developing a tip shop and sustainability hub with or without neighbouring councils.	
1.4	Review the type of bulk vergeside waste being collected to see what materials could be diverted to WtE and how this could be achieved within the current collection contract.	Investigate the financial, social and environmental viability of diverting suitable bulk verge collection waste to diverting to WtE facility. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. If external activity \$20,000.	
1.5	Detailed investigation of vergeside bulk collection or other system changes to improve vergeside recycling. This could potentially reduce costs and could be implemented if deemed advantageous.	Investigate other bulk vergeside collection methods that could reduce cost and increase operational efficiency. This investigation is to be undertaken after WtE is implemented and other methods such as community and charity reuse of bulk waste items is exhausted. Other considerations are to retain the current collection method; however, pursue improved sorting and recycling opportunities for the waste stream prior to going to WtE or landfill. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. If external activity \$30,000.	

Annual Waste Management Actions Continue with the home composting Promote the disbenefit of organic waste in landfill. series of workshops to reinforce the Promote the benefit of importance of diverting organic waste Home composting. from landfill. The growing of vegetables, flowers and plants being the beneficial end result to the community. Cooking with leftovers and cheap healthy alternatives to highly processed food including takeaway. Anticipated Cost – Waste education activity and infrastructure rebates. No additional cost. Cost included in existing Waste Services budget. Increase community education about This campaign is a time-specific focus on the introduction of FOGO and WtE services that will be introduced by the proper use of the three-bin system, 2025. as well as other relevant waste topics. Anticipated Cost – Waste education activity. No additional cost. Cost included in existing Waste Services budget. Encourage schools to participate in the Promote the WasteSorted Schools program amongst local schools, including information sharing and networking Waste Authority's WasteSorted Schools opportunities. program. Drink bottle campaign was trialled at Millen Primary School during bike month in October 2023. The same campaign will be launched at Lathlain Primary as part of Plastic Free July to promote the opening of the stage 2 of the protected bike lane in Carlisle and the riding school bus. Anticipated Cost – Waste education activity. \$5000 to cover cost of drink bottles. Cost to be covered by protected bike lane budget. Expand the existing Container Deposit Waste education team to investigate cost benefit of installing extra cages on public bins around the Town. System (CDS) collection locations If container points are used at events, there could be opportunity for these points to be made available to around the Town and include Events community groups at events (e.g. through Expression of Interest process). such as Dogs Breakfast and Summer Anticipated Cost - Administration activity. No additional cost. Cost included in existing Waste Services budget. If street party. external activity \$20,000. Year 2 - July 2025 to June 2026 Continue community education on the Review existing education material using community feedback and data collection on recycling rates. Target 2.1 correct segregation of waste when education campaign accordingly. using the 3 bin kerbside collection Anticipated Cost – Waste education activity, Additional cost associated with promotional material, \$50,000. service. As per Climate Emergency Plan – Saving of \$340,000/year in waste levy after first 10 years.

April 2024

Revision: Public Consultation

Annı	ual Waste Management Actions	
2.2	Investigate how businesses, especially those in the hospitality industry, can be encouraged to use FOGO.	ToVP to work with local businesses to champion the 3 bin system especially FOGO.
2.3	Investigate options to expand range of materials that can be recycled in the kerbside and/or bulk waste collection	Waste officers to approach service providers to expand the range or materials that can be collected for recycling Investigate feasibility of expanding kerbside collection options like e-waste (look at City of Wanneroo who have 5 separate collections)
2.4	Investigate the establishment of a Community Drop-off Facility, Recycling Centre and Reuse Shop.	The ToVP should continue to investigate the opportunity to establish a local waste management facility (recycling hub) for the drop-off, recycling and resale of materials from the local community. Ideally, if a reuse or tip shop is set up, the facility could be operated by a local community group. This reduces the facility operating cost, provides a facility for the community to be actively involved in waste minimisation and provides an opportunity for knowledge sharing amongst the community (operators and customers). Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. If external activity \$50,000.
2.5	Data collection refinement.	The ToVP currently collects data on its waste management achievements from a range of sources, mainly the MRC and its waste collection contractors. To better understand the current position and identify potential future waste minimisation improvements and initiatives, the ToVP must refine its data collection system to gather robust information on the type and quantity of waste going to landfill. This includes the 3 bin kerbside collection and residue from the vergeside bulk waste system. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. If external activity \$10,000.
Year	3 - July 2026 to June 2027	
3.1	Twelve months after the implementation of the FOGO and WtE collection services, the ToVP should undertake another bin tagging exercise to monitor compliance.	Additional data on contamination levels could be obtained from the collection and processing contractors; albeit that most data is obtained from amalgamated samples from other customers and not ToVP-specific data. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. If external activity \$50,000.
3.2	Continue work with the collection contractors to increase the range of materials that can be recycled.	As outlined in 2.3 Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget.

Annı	Annual Waste Management Actions		
3.3	Investigate the feasibility of a reuse shop in partnership with other Councils.	This activity is included above in the investigation of the opportunity to establish a local waste management facility for the drop-off, recycling and resale of materials from the local community. Joint development with neighbouring Local Governments should be considered, in particular, the City of Perth, which is a fellow member of the Mindarie Regional Council. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. If external activity \$20,000.	
3.4	Investigate the feasibility of installing filtered water bottle refill stations at major public places.	The focus being on reduction on single use plastic water bottles. Water stations should also include drinking fountains for those without water bottles. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget.	
Year	4 - July 2027 to June 2028		
4.1	Investigation of possible contingency planning to ensure continuous waste management services.	Assess the possible impact to the ToVP of each of the current waste management services being suspended or ceased. If the consequence is deemed significant, there is a need to consider possible contingency measures. The main services that would have a direct impact on the community would be the three kerbside bin collection services. These services have a collection component and a disposal component. Either of these components could potentially interrupt the service to the community. Typically, the collection component is the more challenging to replace with short notice, as there are not fleets of side-lift vehicles readily available to take up the additional workload (in 2014 a waste collection company had its whole national fleet grounded; hence, this is a real consideration). The ToVP is to work with its service providers to develop contingency plans in the event that there is an interruption to one of its major waste management services. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget.	
4.2	Investigation of contingency planning for major weather events.	With the impact of global warming, extreme weather events are becoming more common. The ToVP is to consider the impact of extreme storm events on existing waste management services and also the additional services (mainly collection and disposal) that could be available to manage storm damage generated waste. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget. If external activity \$20,000.	
4.3	Encourage and monitor sustainable purchasing within the ToVP.	Sustainable purchasing forms part of the ToVP's Sustainable Procurement and Corporate Social Responsibility policy. The implementation of this policy should be actively encouraged and monitored to ensure that where possible, sustainable purchasing is undertaken. In particular the use of recycled construction products and the use of mulched tree prunings in landscaping works. Monitoring of the range and quantity of sustainable products should be undertaken, and an annual summary thereof produced. This should be used to benchmark	

April 2024 Revision: Public Consultation

Annı	Annual Waste Management Actions		
		the minimum level of sustainable purchasing used for the following year. Continuous improvement will see the ToVP leading by example and demonstrating to the community that it is committed to waste minimisation. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget.	
4.4	Waste avoidance initiatives with other local governments.	The vast majority of the ToVP's waste minimisation activities, challenges and opportunities are common to all metropolitan local governments; consequently, there are similar solutions and community education requirements. The ToVP should work with other local governments to identify synergies between the organisations that could be developed to improve waste minimisation and/or reduce the cost of these activities to the individual organisations. In addition, there is the increased opportunity to obtain state funding for a wider range of waste minimisation activities if there is a greater population being served or the potential for a greater quantity of waste to be recycled. To a degree, the ToVP achieves this through the MRC; however, there are additional synergies that could be identified between some of the MRC member councils or some neighbouring councils outside of the MRC structure. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget.	
Year	5 - July 2028 to June 2029		
5.1	Continuation with carry-over activities from previous years.	Continue with previous years' activities as necessary. Anticipated Cost – Administration activity. No additional cost. Cost included in existing Waste Services budget.	
5.2	Develop a new Strategic Waste Management Plan for the next five- year period.	Use this current SWMP (amended as applicable over the years) as the basis for the development of the new SWMP, which should be ready for implementation by 1 January 2029. Anticipated Cost – Officer time if completed internally, External activity \$40,000.	

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Appendix 2 – Actions and Achievements 2018 to 2023

No.	Activity	Details/Comment
Year	1 - 2018 – 2019 Financial Year	
1.1	Appoint a responsible Council Officer as the custodian of the SWMP.	Formalise the appointment of a Council Officer as the custodian of the SWMP. The typical role of the officer would be to manage the implementation of the SWMP to ensure that, as best possible, the proposed activities are actioned in a timely and efficient manner. The responsible officer would ideally be at management level and be in a position to allocate sufficient resources to undertake the various waste management activities, ensure that the activities are carried out and then report to Council on a regular basis. Achievement as of 31 December 2023 – Appointed in May 2022. Action completed
1.2	Develop a clear policy statement on the drivers that influence waste management decision-making to increase waste diversion within the ToVP and establish relevant benchmark targets against which achievements can be gauged.	Typically, local governments use the State Waste Strategy Targets against which to benchmark success. This is a reasonable starting point; however, there also needs to be consideration for community involvement and satisfaction. Once the decision-making drivers have been agreed by Council, these drivers will provide the Council Officers with a framework around which to investigate and recommend future waste minimisation activities. Achievement as of 31 December 2023 – Work in progress. Community consultation undertaken in
1.3	Develop a comprehensive community education strategy.	 September 2023. Policy statement currently being developed. Once the waste minimisation decision-making drivers have been agreed by Council, the ToVP should develop a comprehensive community education strategy, in conjunction with community input. The strategy should: Relate to the overall method of community education, not the specific message relating to a particular activity; and, Identify aspects such as general education (eg. Annual Waste Guide, waste education courses such as WASTEless) and also the project specific education (eg. the rollout of an organics bin collection with at initial, intensive education campaign and then subsequent smaller "top-up" education campaigns reaffirming the message and providing an update of success). Along with the development of the community education strategy, there is a need to identify the conceptual budget costs associated with these activities, not the dollar values, but possibly a percentage of the annual waste management budget for general education and a percentage of the annual project cost

No.	Activity	Details/Comment
		for the project specific education process. The project specific percentage will vary depending on the complexity of the proposed project and the degree of community involvement required.
		The strategy should also consider how to gauge the success of the community education effort (education cost) versus the results achieved (cost reduction due to effective community participation). This is not necessarily an easy exercise and will generally only be identified by trend changes monitored over time; typically, annual trends.
		Achievement as of 31 December 2023 – Work in progress. Numerous community education activities have been undertaken and are ongoing. There is however, no community education strategy defining the process and desired outcomes for the community education activities and how the success of these activities can be monitored.
1.4	Detailed investigation of bulk bin vergeside collection or other system changes to improve vergeside recycling and potentially reduce costs and then if deemed advantageous, implement the system(s).	Liaise with other local governments that have implemented an on-demand bulk bin verge waste collection service to gauge the relevant success of this system. Success being primarily an assessment of the associated cost in comparison to the local government's costs prior to the implementation of the new system. The cost should be broken down into the collection/sorting cost and the residual disposal cost. A further determining factor being the change in waste quantity being collected (presumed reduction). This may be as a result of stockpiling of waste by residents who are yet to embrace the new system and in time, this waste will be presented and hence the ToVP will ultimately incur the waste handling cost. Another consideration is the potential reduction in vergeside "scavenging" opportunity which will reduce the reuse component of this waste stream and result in more waste going to landfill. Other considerations are to retain the current collection method; however, pursue improved sorting and
		recycling opportunities for the waste stream prior to going to landfill. Achievement as of 31 December 2023 – No progress on this action item.
1.5	Work with community groups and charity organisations to identify opportunities to extract reusable items from the bulk verge waste prior to collection.	Reuse of materials is preferred to recycling; hence, prior to bulk verge waste being collected and sent to a sorting facility, it is preferable that as much reusable material as possible has been removed from the waste stream before collection. Historically, kerbside "scavenging" has resulted in the removal of some reusable materials. With increased community and/or charity organisation involvement more can be done to remove reusable materials. This action becomes more important if the ToVP opts to implement an ondemand bulk bin service to replace its current vergeside collection service. The ToVP can play a coordination and community education role in improving the diversion of reusable material from the

Strategic Waste Management Plan

No.	Activity	Details/Comment
		vergeside bulk waste. The ToVP would then have the benefit of reduced waste generation and an associated reduction in collection, sorting and disposal costs.
		Achievement as of 31 December 2023 – Ongoing action. Considered various opportunities including Reuse Shop, Garage Sale Trail, Sustainability Hub for a "repair café", swap/purchase shop. Final outcome yet to be determined.
1.6	Assess the State Waste Strategy review outcome and the possible impact to the ToVP.	The State Waste Strategy is currently under review, with the outcome anticipated to be announced in late 2018. The ToVP should assess the outcome of the review to confirm whether there are any changes required to this SWMP.
		Achievement as of 31 December 2023 – In February 2019, the Minister for Environment launched the WA Waste Strategy: West Australian Waste Avoidance and Resource Recovery Strategy 2030. This waste Strategy set priorities and targets through to 2030. These new priorities and targets where similar to the previous 2020 State Waste Strategy and consequently, there was no need to amend the ToVP's Strategic Waste Management Plan. There was however a need for the ToVP to further increase waste diversion from landfill to meet the increased waste diversion targets set in the new State Waste Strategy. Action completed.
Year	2 - 2019 – 2020 Financial Year	
2.1	Serious discussion with MRC member councils about the potential dramatic impact of the kerbside organics bin on the RRF and the eventual future of the MRC and the possible impact on the ToVP future waste and recycling strategy.	With the larger MRC member councils opting to embrace the kerbside organics bin system, which will ultimately result in the Neerabup RRF becoming less efficient and significantly more expensive to operate, there is little benefit in the ToVP not following suit. The MRC is now put in a situation where there is potentially a need to reinvent its benefit to its member councils (as is currently occurring with the Southern Metropolitan Regional Council). This is an ideal opportunity for the member councils to have a constructive discussion on the future of the MRC, with each member councils considering the individual and communal benefit of the MRC. In these considerations, the ToVP should assess the possible impact on its future waste and recycling strategy and ability to achieve its stated Strategic Policy.
		Achievement as of 31 December 2023 – The MRC and its member councils have reviewed the performance of the Neerabup RRF and, although the facility operated well, the input feedstock had changed dramatically as a result of some member councils opting to commence an organics bin system. Consequently, the financial viability of the facility had been negatively impacted. The MRC subsequently made the decision to cease operation and as a result, the Neerabup RRF shut down on 31 August 2021. Action complete.

No.	Activity	Details/Comment
2.2	Detailed investigation of the option of a kerbside organics bin and then if deemed advantageous, implement the system.	With the larger MRC member councils opting to embrace the kerbside organics bin system, which will ultimately result in the Neerabup RRF becoming less efficient and significantly more expensive to operate, there is little benefit in the ToVP not following suit. Based on information available from those local governments that have implemented or are in the process of implementing a kerbside organics bin system, there appears to be some financial benefit to the ToVP in following suit. The ToVP should:
		 Liaise with these local governments to gauge the relevant success of this system; Assess cost impact (green bin vs red bin and lime green bin); Assess potential negative impact on the Neerabup RRF and the subsequent increase in the RRF operating cost, which the ToVP will have to share with the other MRC member councils; and, Make its determination based on cost.
		Achievement as of 31 December 2023 – The Neerabup RRF ceased operations on 31 August 2021. With the shutting down of the RRF, the ToVP opted to implement a three-bin kerbside collection system, incorporating an organics bin. In August/September 2022 a GO bin was rolled out to all properties >400 m² and an opt-in option for smaller properties. With the implementation of the GO bin, the ToVP reduced the vergeside bulk greenwaste collections from three to two per year and in time, possibly in future will consider reducing the service down to one collection per year. The ToVP is planning to roll out a FOGO system in mid-2025. Action complete.
2.3	Increase participation in existing recycling systems.	Improving the efficiency or expanding the coverage of existing systems is a highly cost-effective means of increasing waste diversion from landfill. This can incorporate discussion/agreement with existing service providers to increase the range or scale of the existing service and/or community education to better utilise the existing services. Examples being:
		 Ensuring that the appropriate material is placed in the green bin and the yellow bin. That is to reduce the residual content in the yellow bin and to remove recyclable packaging material from the green bin; Encouraging residents to use larger yellow bins (360 L) if needed as opposed to placing recyclable in the green bin once the yellow bin is full; Increased promotion of Hazardous Household Waste collection days and locations; and, Install additional small item recycling stations at public places such as shopping centres, swimming pool, post offices, police stations and larger office complexes etc. (batteries, fluoro globes, mobile phones, ink cartridges and other small items).

Strategic Waste Management Plan Revision: Public Consultation

No.	Activity	Details/Comment
		 Achievement as of 31 December 2023 – Ongoing action. There have been a number of initiatives undertaken including: An audit of the ToVP's website and numerous changes made to improve community knowledge on how best to utilise the available waste management solutions; Waste education presentations – numerous on varied topics; Development of an annual Waste and Recycling Guide (annual waste calendar); Development of promotional material for visual displays; and, Education tents at community events.
2.4	Discussion with the City of South Perth about increasing the range of waste diversion activities at the South Perth Recycling Centre.	The ToVP residents are able to utilise the City of Perth waste transfer station. There is an opportunity to increase the range of waste diversion activities at this facility, which would benefit both the ToVP and the City of South Perth. The ToVP should discuss opportunities for an expanded range of waste diversion activities at this facility. Typically, these could include household hazardous waste, used paint, gas bottles, fire extinguishers etc.). Achievement as of 31 December 2023 – The City of South Perth no longer allows the ToVP residents to utilise its recycling centre. Action completed.
2.5	Data collection refinement.	The ToVP currently collects data on its waste management achievements from a range of sources, mainly the MRC and its waste collection contractors. In order to better understand the current position and to identify potential future waste minimisation improvements and initiatives, the ToVP should refine its data collection system to gather more information on the type and quantity of waste going to landfill. This includes the green wheelie bin (MRC waste audits have assisted in this), residue from the yellow bin, residue from the vergeside bulk waste system and self-haul waste to drop-off facilities. Ideally there should be some liaison with the MRC and its individual member councils to try and develop a consistent data reporting system. Achievement as of 31 December 2023 – No progress on this action item.
2.6	Consider the impact of any changes to the State Waste Strategy Targets (current targets end on 30 June 2020).	The State Waste Strategy period of currency ends on 30 June 2020, as does the National Waste Policy. Prior to this date, it is anticipated that the Stage Government would issue an updated or new State Waste Strategy for a further five-year period, which is likely to be guided by changes at national level. Once this has been announced, the ToVP is to review the new State Waste Strategy to determine if the ToVP's current waste management strategy and/or direction remains relevant. If necessary, this Strategic Waste Management Plan may need to be amended to cater for the new State strategic direction.

No.	Activity	Details/Comment
		Achievement as of 31 December 2023 – In February 2019, the Minister for Environment launched the WA Waste Strategy: West Australian Waste Avoidance and Resource Recovery Strategy 2030. This waste Strategy set priorities and targets through to 2030. These new priorities and targets where similar to the previous 2020 State Waste Strategy and consequently, there was no need to amend the ToVP's Strategic Waste Management Plan. There was however a need for the ToVP to further increase waste diversion from landfill to meet the increased waste diversion targets set in the new State Waste Strategy. Action completed.
Year	3 - 2020 – 2021 Financial Year	
3.1	Assess the impact of the introduction of the Container Deposit Scheme on waste management systems and costs.	Based on the assumption that the Container Deposit Scheme will be introduced in early 2019, once it has been in operation for a minimum of one year, the ToVP should undertake an investigation to assess the impact of the Container Deposit Scheme on the type and quantity of materials presented in the yellow bin and the potential cost impact to the ToVP (change in processing cost, up or down). The kerbside collection contractor would assist in this regard. The ToVP should also liaise with other local governments to compare statistics to gain a more aggregated view across the Metropolitan area. Based on the outcomes of the investigation, there may be a need to implement some changes to the ToVP's waste management activities or to undertake some community education to improve system efficiencies. Achievement as of 31 December 2023 – With the implementation of the Container Deposit Scheme (CDS) in October 2020, there was a comprehensive audit of the content of the yellow wheeling bin undertaken at State level to determine the typical content of CDS containers in the yellow bin waste stream. The result of this audit was that the sorting facilities receive the deposit for the assessed typical quantity of CDS containers in the waste stream. There was then a "profit share" system set up whereby local government receives a portion of the CDS deposit revenue from the sorting facilities. The ToVP receives part of the CDS revenue from its yellow bin collection and sorting contractor. Action completed.
3.2	Consider the development of a reuse shop, possibly in conjunction with the MRC, City of Perth and/or the City of South Perth, ideally operated by an active community group.	The MRC and the City of Stirling both operate successful reuse and recycling facilities. The ToVP should investigate the possibility of developing a reuse and recycling shop in conjunction with other neighbouring local governments or the southern MRC member councils. The most obvious candidate being the City of South Perth at its South Perth Recycling Centre, as this is an existing waste management facility and in close proximity to the ToVP. Ideally, once set up, the facility could be operated by a local community group. This reduces the facility operating cost, provides a facility for the community to be actively involved in waste minimisation and provides an opportunity for knowledge sharing amongst the community

No.	Activity	Details/Comment
		(operators and customers). The MRC would likely be willing to assist in the establishment of the facility and possibly contribute to the facility operating cost. Achievement as of 31 December 2023 – Work in progress. A number of options are being considered. A final decision is yet to be made.
3.3	Optimise community involvement in local small-scale recycling solutions and initiatives.	There are a range of relatively simple, small-scale activities that the community can get involved in that would divert waste from landfill or increase the opportunity/efficiency of recycling. The ToVP should liaise with the various active community groups within the ToVP to identify where there are opportunities, these being improvements to existing activities or the implementation of new activities. Through the ToVP's involvement, there will be more encouragement for the community to get involved and also the opportunity to obtain some funding from the Waste Authority or other sources for the implementation of recycling activities. Typically, these small-scale recycling solutions could include: • Worm farms and backyard composting. Organic materials are currently being processed at the Neerabup RRF and potentially through a future kerbside organics service; hence community education and the cost benefit of this type of solution needs to be considered; • Increased number of drop-off facilities at community locations for small recyclable items such as batteries, fluoro globes/tubes, mobile phones, ink cartridges and other small items. This could be expanded to larger items such as E-waste, wet cell batteries etc. at some locations. The collection and appropriate handling of the material needs to be considered; • Working with community groups to expand knowledge base, improve community involvement, get ideas, promote community education from within. Use current momentum of the recent plastic bag ban to increase waste minimisation awareness. With the impending introduction of a container deposit scheme, there will presumably be significant state-wide community education, this is again an opportunity to increase waste minimisation awareness; and, • With the immanent implementation of the Container Deposit Scheme (early 2019) there is an opportunity to develop improved small-item recycling drop-off stations in close proximity to the container return stations. Achievement as of 31 December 2023 – Ongoing actio
		addition small drop-off location for hazardous items.

Strategic Waste Management Plan

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No.	Activity	Details/Comment
3.4	Increased community education about what can be placed in the yellow bin (and lime green bin if the organics bin option has been implemented).	There is currently approximately 15% to 20% waste residue in the yellow bin (typical Metropolitan wide average) and approximately 30% recyclable materials in the green bin (MRC waste audits). With some dedicated community education, the percentage of waste going to landfill could be easily reduced below current levels in both the yellow and green bins. This improvement in waste diversion would be achieved without any need to change waste services, simply get the community to use the existing systems more correctly. The cost of the community education campaigns (this would need to be an ongoing process) would be compared to the reduction in landfill waste disposal cost to assess the net financial benefit of this action. Again, the recycling benefit is not to be ignored. This action is to include the organics bin if it has been implemented.
		Achievement as of 31 December 2023 – Ongoing action. Ongoing community education to improve the utilisation of existing waste management systems, including the yellow bin.
		GO bin rolled out in August/September 2022. An associated community education campaign was also rolled out. Ongoing education and promotional material developed.
Year	4 - 2021 – 2022 Financial Year	
4.1	Investigation of possible contingency planning to ensure continuous waste management services.	Based on current waste management services, assess the possible impact to the ToVP of each of these services being suspended or ceased. If the consequence is deemed significant, then there is a need to consider possible contingency measures to best manage the consequence of this type of event occurring. The main services that would have a direct impact on the community would be the kerbside waste and recyclable collection services. These services have a collection component and a disposal component. Either of these components could potentially interrupt the service to the community. Typically, the collection component is the more challenging to replace with short notice, as there are not fleets of sidelift vehicles readily available to take up the additional workload (in 2014 Cleanaway had its whole national fleet grounded; hence, this is a real consideration). The ToVP is to work with its service providers to develop contingency plans in the event that there is an interruption to one of its major waste management services. Achievement as of 31 December 2023 – No progress on this action item.
4.2	Work with the collection contractors to increase the range of materials that can be recycled.	The ToVP should discuss with the current recycling collection contractor the option of increasing the range of recyclable materials that can be placed in the yellow bin. If agreed, this will increase the quantity of material being recycled. There may be some resistance to change by the current collection contractor, unless the ToVP is prepared to cover any cost increases; however, moving forward, the ToVP should

Strategic Waste Management Plan

No.	Activity	Details/Comment
		include in its future recycling collection tenders either the stipulation that the successful contractor must receive a specific, expanded range of materials or have a tender selection criterion whereby there is preference for a greater range of acceptable material types. Typically, the increase range of materials could include plastic film (plastic bags/wrap), polystyrene, small household appliances, crockery/cutlery, all plastics, ceramic and terracotta etc. In addition, It is to be noted that the green bin is processed through the Neerabup RRF, which only removes organic material; consequently, the more inorganic material that can be removed from the green bin, which has a processing cost in the order of \$250/t, and transferred to the yellow bin, which is processed for substantially less, would result in a cost saving to the ToVP, even though the inorganic material may not be recyclable and still end up in a landfill. If there is an increase in the quantity of residue being generated in the yellow bin, this will result in an increase in the sorting cost of the yellow bin material, which will be passed on to the ToVP. However, this increased sorting cost will still be substantially less that the RRF processing cost; hence, a net cost saving to the ToVP. With the bulk verge waste also being sorted before going to landfill, the same opportunity exists with this waste stream; however, the benchmark cost would be the landfill disposal cost in order to assess the net cost benefit. The recycling benefit is not to be ignored. Achievement as of 31 December 2023 – A valet waste service was considered by the MRC for specific waste streams; however, the cost was deemed excessive for the net benefit gained.
4.3	Encourage and monitor sustainable purchasing within the ToVP.	Sustainable purchasing forms part of the ToVP's Sustainable Procurement and Corporate Social Responsibility policy. The implementation of this policy should be actively encouraged and monitored to ensure that where possible, sustainable purchasing is undertaken. In particular the use of recycled construction products and the use of soil conditioner produced by the Neerabup RRF should be encouraged. Monitoring of the range and quantity of sustainable products should be undertaken, and an annual summary thereof produced. This should then be used as the benchmark as the minimum level of sustainable purchasing used for the following year. Continuous improvement will see the ToVP leading by example and demonstrating to the community that it is committed to waste minimisation. Achievement as of 31 December 2023 – No progress on this action item.
4.4	Waste avoidance initiatives with other local governments.	The vast majority of the ToVP's waste minimisation activities, challenges and opportunities are common to all Metropolitan local governments; consequently, there are similar solutions and community education requirements. The ToVP should work with other local governments to identify synergies between the organisations that could be developed to improve waste minimisation and/or reduce the cost of these

Strategic Waste Management Plan Revision: Public Consultation

No.	Activity	Details/Comment
		activities to the individual organisations. In addition, there is the increased opportunity to obtain state funding for a wider range of waste minimisation activities if there is a greater population being served or the potential for a greater quantity of waste to be recycled. To a degree, the ToVP achieves this through the MRC; however, there are additional synergies that could be identified between some of the MRC member councils or some neighbouring councils outside of the MRC structure.
		Achievement as of 31 December 2023 – Ongoing action. City of South Perth Recycling Centre no longer available resulted in increased community need for similar services.
Year	5 - 2022 – 2023 Financial Year	
5.1	Continuation with carry-over activities from previous years.	Continue with previous years' activities as necessary. Achievement as of 31 December 2023 – Ongoing action.
5.2	Develop a new Strategic Waste Management Plan for the next five-year period.	Use this current SWMP (amended as applicable over the years) as the basis for the development of the new SWMP, which will be ready for implementation by 30 June 2023. Achievement as of 31 December 2023 – This new Strategic Waste Management Plan is the achievement of this action. Action Completed.
Gene	eral Items – Relevant to most years	
1	Annual in-house review of this Strategic Waste Management Plan	Towards the end of the year or early in the following year, the Council Officer responsible for the custody of the SWMP is to undertake a review of the SWMP to assess its current relevance and to review the ToVP's waste management achievements against the Proposed Activities for the year and to assess the Proposed Activities for the following year, including if, who and how these future Proposed Activities are to be undertaken. Ideally this review will include a comparison of the current waste diversion percentage achieved against the previous year's achievement and the ToVP's strategic policy benchmark targets (State Waste Strategy target). Following this annual review, a brief report should be presented to Council as an update to the ongoing waste management activities within the ToVP.
		Achievement as of 31 December 2023 – Undertaken annually inhouse and occasionally using an external consultant. The most recent external review occurred in December 2021. Action Completed
2	Allocated budgets for the implementation of identified activities.	Achievement as of 31 December 2023 – Ongoing action

No.	Activity	Details/Comment
3	Continuous improvement of existing systems.	Achievement as of 31 December 2023 – Ongoing action
4	Progress carry-over activities from previous	Achievement as of 31 December 2023 – Ongoing action
	years.	



