

Waste Education Plan

2022 – 2025





Acknowledgement of Country

The City of Mandurah acknowledges and pays respect to the Bindjareb people, who are the Traditional Owners and First Peoples of this land. We pay respect to the Elders past, present and emerging and acknowledge the continuing contribution they make to the life of this City and this region.

Purpose

The City of Mandurah Waste Education Plan has been developed as an action of the City of Mandurah Strategic Waste Plan 2020-2025. The purpose of this plan is to:

- Identify priorities for waste education and engagement in Mandurah
- Guide how we engage with our community and staff on these priorities to support positive behaviour change

This includes how we encourage and empower our community and staff to protect our beautiful natural environment and create harmonious neighbourhoods by:

- In the first instance, reducing the amount of waste (rubbish) they generate
- If the generation of waste cannot be avoided, increasing their reuse and recycling of materials, and recovery of resources
- Ensuring they dispose of all materials and waste responsibly and appropriately

This Plan is considered a “living” document, and will be regularly updated to reflect and address key waste education issues. The first formal review will be undertaken in 2025 in line with a review of the State’s Waste Avoidance and Resource Recovery Strategy 2030. This will be followed by a second review in 2030 to align with the culmination of the Waste Avoidance and Resource Recovery Strategy 2030.

Strategic Alignment

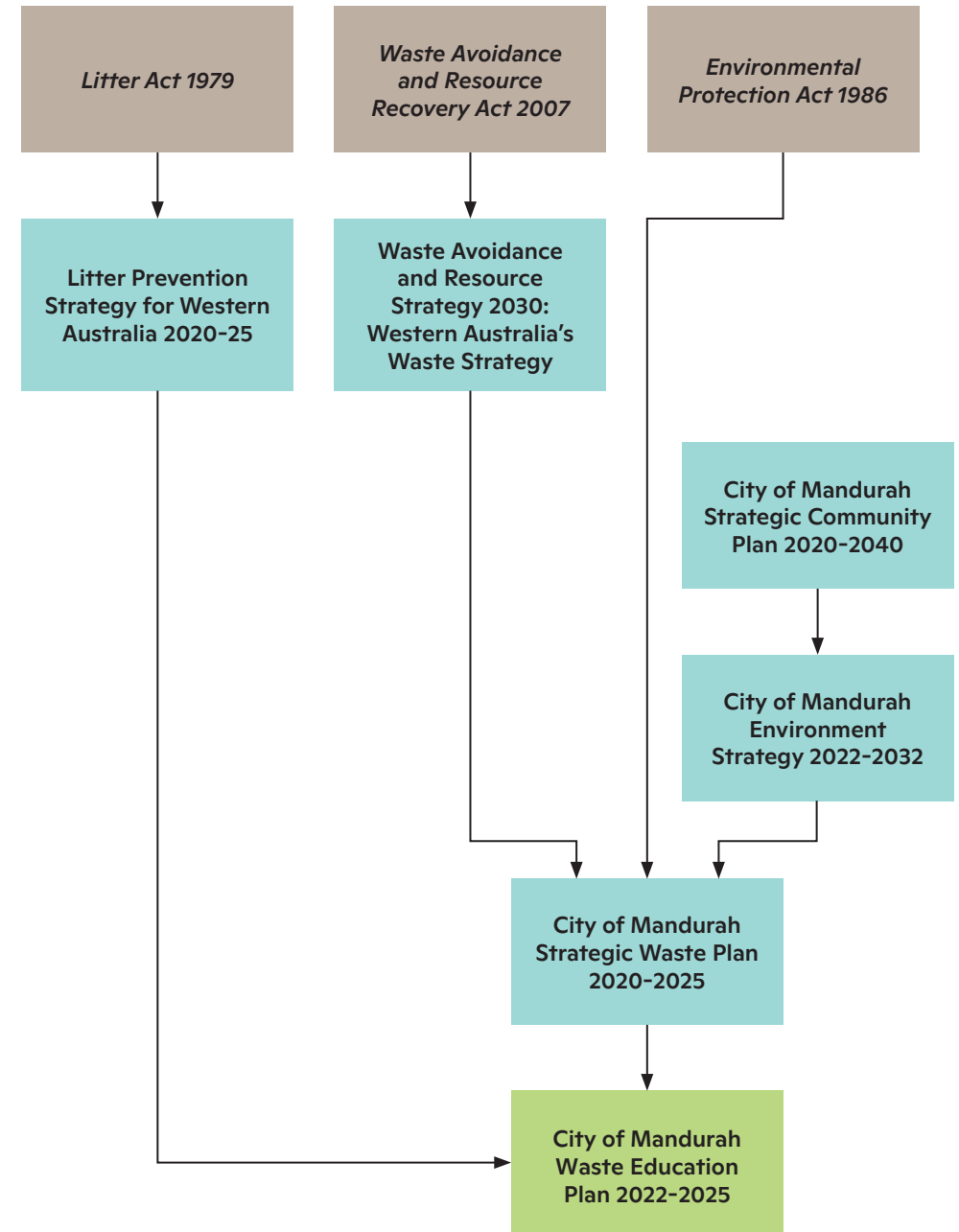
State Waste Strategy and Legislation

In 2019, the State Government released the Waste Avoidance and Resource Recovery Strategy 2030. This strategy, and the associated Action Plan, introduces a new direction for waste management in Western Australia which includes an increased focus on waste avoidance and aims to support a shift to a circular economy.

Shifting to a circular economy will mean changing from a linear waste management system, often called the “take, make, use and dispose” system, to a material efficiency approach. This means the system will aim to use and reuse products, components and materials over and over again for as long as possible, instead of using them once and then throwing them away. A circular economy is considered more sustainable and better for our environment because its focus on reusing the same material over and over means using fewer raw materials in the first instance. This focus on material recovery through reuse and recycling also means a circular economy sends less waste to landfill.

The Waste Avoidance and Resource Recovery Strategy recognises that all Western Australians have a part to play in reducing our waste, recycling more and caring for our environment by disposing of waste correctly. This includes local governments, residents, community groups, schools, businesses and the commercial sector.

The strategy prescribes ambitious targets for local government regarding waste avoidance, material recovery and environmental protection. These are discussed further under State and Local Targets.



City of Mandurah Strategic Community Plan and Environment Strategy

In 2018, the City of Mandurah worked extensively with our community to develop the City of Mandurah Strategic Community Plan 2020-2040. Throughout this process, our community shaped a shared vision and aspiration for our City to guide the next twenty years of decision-making.

Through this consultation Environment was identified as one of four Key Focus Areas for the City. The resultant community vision makes it clear that caring for our environment is a priority:

We are built in nature – a meeting place surrounded by unique waterways, where the wellbeing of our people and our environment are nurtured.

In 2023, the City developed its first ever Environment Strategy. This Strategy provides an overarching direction for the City’s environmental work, along with objectives for each of the priority management areas. This includes waste management and minimisation. Continuing to educate and partner with our community on how to manage waste responsibly and with environmental protection at the forefront, plays an important role in delivering this strategy.

The Waste Education Plan aligns with the following objectives outlined in the City’s Strategic Community Plan.

Focus Area	Strategic Objective	Community Outcome
Environment	4.3 Create opportunities for the community to promote and preserve our local natural environment 4.4 Educate and provide leadership on environmental and climate change related issues 4.5 Partner and engage with our community to deliver environmental sustainability outcomes	A beautiful, clean, and sustainable environment for all Deep engagement and respect for the environment



State and Local Targets

The City of Mandurah has developed a Strategic Waste Plan 2020-2025 to help us achieve the State Government's waste targets and protect our environment by becoming a more sustainable, low-waste City.

In line with the State's direction, the City's overarching Environment Strategy includes the following objective for waste management in the City of Mandurah:

Strive towards zero landfill to reduce our environmental footprint and protect the environment from the impacts of waste and litter.

In addition, the City has set locally-relevant targets to guide the development of waste management and education actions. These targets are based on 2014/15 data and are in alignment with State targets.

A breakdown of both State and local waste targets is included on the following pages.



State Government Targets

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

OBJECTIVES

AVOID

Western Australians generate less waste

TARGETS

By 2025:

- 5% reduction in municipal solid waste generation per capita

By 2030:

- 10% reduction in municipal solid waste generation per capita
- All waste is managed and/or disposed using better practice approaches

RECOVER

Western Australians recover more value and resources from waste

TARGETS

By 2025:

- Increase municipal solid waste material recovery to 67% in the Perth and Peel regions
- All local governments in the Perth and Peel region provide consistent three bin kerbside collection systems that include separation of FOGO from other waste categories

By 2030:

- Increase municipal solid waste material recovery to 70% in the Perth and Peel regions
- All waste facilities adopt resource recovery better practice

PROTECT

Western Australians protect the environment by managing waste responsibly

TARGETS

By 2025:

- Recover energy only from residual waste

By 2030:

- Move towards zero illegal dumping
- Move towards zero littering
- No more than 15% of waste generated in the Perth and Peel regions is disposed to landfill
- All waste is managed and/or disposed to better practice facilities
- All waste facilities adopt environmental protection better practice

City of Mandurah Targets

Strive towards zero landfill to reduce our environmental footprint and protect the environment from the impacts of waste and litter.

OBJECTIVES

AVOID

Encourage our community and staff to generate less waste

TARGETS

By 2025:

- Generate no more than 633kg of waste per person, per year

By 2030:

- Reduce waste generation to no more than 600kg per person, per year

Ongoing:

- Continue to manage all waste received at the Waste Management Centre using better practice

RECOVER

Support our community to recover more resources and materials from the waste stream

TARGETS

By 2025:

- Increase resource recovery by 40% (to 67%)

By 2030:

- Increase resource recovery by 43% (to 70%)

PROTECT

Protect our beautiful natural environment by managing waste responsibly, and inspiring our community to do the same

TARGETS

By 2030:

- Move towards zero illegal dumping
- Move towards zero littering
- After material recovery, all of the City's waste is sent to Waste to Energy, resulting in near zero landfill

Current Waste Scenario

The City currently provides a range of waste services to its residents, including kerbside bin collection, additional verge collections, and recycling services at major City facilities and the Mandurah Waste Management Centre.



Green Top 240L Rubbish Bin Collection

Weekly - sent to Cleanaway landfill in Dardanup



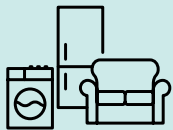
Yellow Top 240L Recycling Bin Collection

Fortnightly - sent to Cleanaway Materials Recovery Facility in South Guildford



Green Waste Collection

Sent to Mandurah Waste Management Centre for mulching



Junk Verge Collection

Sent to Mandurah Waste Management Centre



Mandurah Waste Management Centre

Green Waste and General Waste vouchers are provided to ratepayers



Diversion from Landfill

Currently 27%

As a local government, there are many different types of waste that the City is required to manage. As a broad definition, waste can be considered as any solid material, liquid or gas that is leftover, excess to needs, unwanted, or of no use for the task it was intended for, that is disposed of to the environment (e.g. landfill).

In 2021/22, the City received a total of 64,856 tonnes of waste at the Mandurah Waste Management Centre. This was made up of:

- 30,960 tonnes of municipal solid waste (waste from the green kerbside bin)
- 1,347 tonnes of street and public bins
- 2,354 tonnes of hard waste (verge collections)
- 1,503 tonnes of commercial waste
- 5,239 tonnes of general waste
- 313 tonnes of general waste (Council Operations)
- 84 tonnes of asbestos
- 5,554 tonnes of construction and demolition waste
- 7,652 tonnes of green waste (includes green waste from verge collections)
- 6,796 tonnes of kerbside recyclables
- 3,054 tonnes of recyclable materials

The City recovered 17,501 tonnes of recyclable materials in 2021/22, achieving a recovery and landfill diversion rate of around 27%.

Education Focus Areas

The Waste Education Plan focuses on five key areas which aim to:

Educate, encourage and empower our staff and community to help reduce our environmental footprint and create a beautiful, clean and sustainable environment for all by adopting more environmentally-friendly waste behaviours.



Reducing the City's Waste

Reducing waste associated with City operations



Appropriate Disposal of Waste

Ensuring Mandurah's waste is disposed of in an environmentally-sensitive manner



Waste Avoidance

Encouraging our staff and community to reduce unnecessary consumption and production of waste



Litter and Illegal Dumping

Reducing the amount of litter and illegal dumping in our City



Material Recovery

Making it easy for our staff and community to recycle and recover materials from the waste stream

Current Examples



Annual Waste and Recycling Guide

The City provides the community with a comprehensive Waste and Recycling Guide each year and a Rates Booklet that contains relevant waste management information. Educational messages in the guide are consistent with State Government initiatives, such as the WasteSorted 'Be a GREAT sort' campaign. This ensures the community receives consistent messaging on waste avoidance, resource recovery and appropriate waste disposal behaviour.

Other information in the guide includes advice on how to dispose of Household Hazardous Waste and problematic waste items, along with information on the "Containers for Change" program.



Single-use Plastic Reduction

The City has been encouraging our community to reduce their single-use plastic for a number of years. This includes:

- Promoting Plastic Free July and delivering workshops to educate our community on how to reduce their use of plastic
- Developing the Plastic Free Mandurah Simple Switches Guide to help our community to switch to plastic-free alternatives to everyday products
- Encouraging local businesses to sign up to plastic education programs, including The Last Straw, Responsible Cafés and Plastic Free Places

We've also reduced our own plastic use by switching from regular dog poo bags to compostable alternatives.



Partnering with Community

The City has supported local community clean-ups for nearly twenty years. More recently, since 2018, the City has worked closely with Coastal Waste Warriors to inspire our community to get involved in clean-ups around our waterways. In just four years, Coastal Waste Warriors has collected over 100,000 pieces of litter with the help of nearly 2,500 volunteers.

We also work with other groups and organisations, including Peel-Harvey Catchment Council, Mandurah Volunteer Dolphin Rescue, Estuary Guardians and the Department of Biodiversity, Conservation and Attractions, on their Pave the Way, Reel It In and Luca's Legacy clean-up events.



Grow It Local

In 2022, the City launched its involvement in Grow It Local, an online local grow community, celebrating backyard, balcony, community and window-sill farmers. The community can be inspired by growing stories and connecting with others, sharing knowledge, expertise, produce and recipes.

Grow It Local's mission is to make growing food more accessible, and getting more people growing, sharing and eating locally grown foods. The online community provides a connection to nature and community, inspiring positive health & wellbeing, increasing composting and reducing organic waste to landfill in a fun and delicious way.

Residents are encouraged to join Grow It Local for free, and access a wealth of online knowledge such as free workshops, information about growing edible food, composting, worm farming and environmentally sustainable gardening.



Partnering with Primary Schools

As part of the Mandurah Cleanaway Waste Alliance, schools in Mandurah can access a free waste education program. The comprehensive program has been designed to complement National and State curriculum, while delivering interactive and engaging sustainability education sessions to students from Years 1-6.

The aim of the program is to:

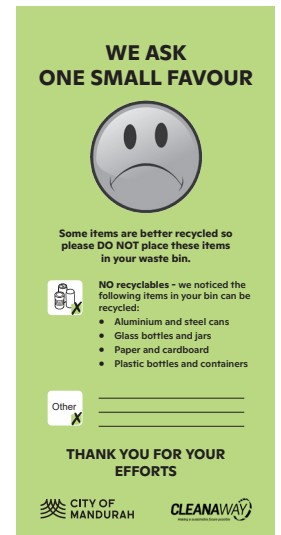
- Educate students on the waste hierarchy, focusing on waste and contamination minimisation
- Provide students with the knowledge to make wise waste decisions beyond the classroom, in their homes, schools and communities



Bin Tagging and Composition Audits

In partnership with Cleanaway, the City conducts a regular Bin Tagging program to provide feedback to residents on their use of their kerbside bins. The Bin Tagging program focuses on reducing contamination and increasing resource recovery from the kerbside bin system.

Waste Composition Audits are also conducted to help the City better understand how our community are using their kerbside bins. This helps us to identify education priorities and tailor our programs to address problem materials.



Guiding Principles for Waste Management

The City's approach to waste management and education is guided by two key principles: the Waste Hierarchy and the Circular Economy.

The Waste Hierarchy is an integral part of the *Waste Avoidance and Resource Recovery Act 2007* and is a guiding concept in the Waste Avoidance and Resource Recovery Strategy. It is a widely-accepted tool that prioritises waste management options to achieve the best environmental, social and health outcomes. The most environmentally friendly, and therefore the most preferred, option in the hierarchy is avoiding the creation of waste in the first instance.

The hierarchy then moves through various resource recovery options, including recycling and energy recovery, to the least preferred option of disposal/landfill.

The City's work in waste education and engagement will focus primarily on encouraging our community and staff to adopt waste avoidance and recovery behaviours. This aims to encourage our community to live more sustainably to better support our beautiful natural environment.

To manage any remaining waste in the most environmentally preferred way, the City has committed to sending its residual waste (rubbish that would normally be sent to landfill) to a Waste to Energy plant. When combined, these actions will result in near zero landfill being generated by the Mandurah community.

Figure 1 demonstrates how the City's education, resource recovery and Waste to Energy initiatives fit within the Waste Hierarchy.

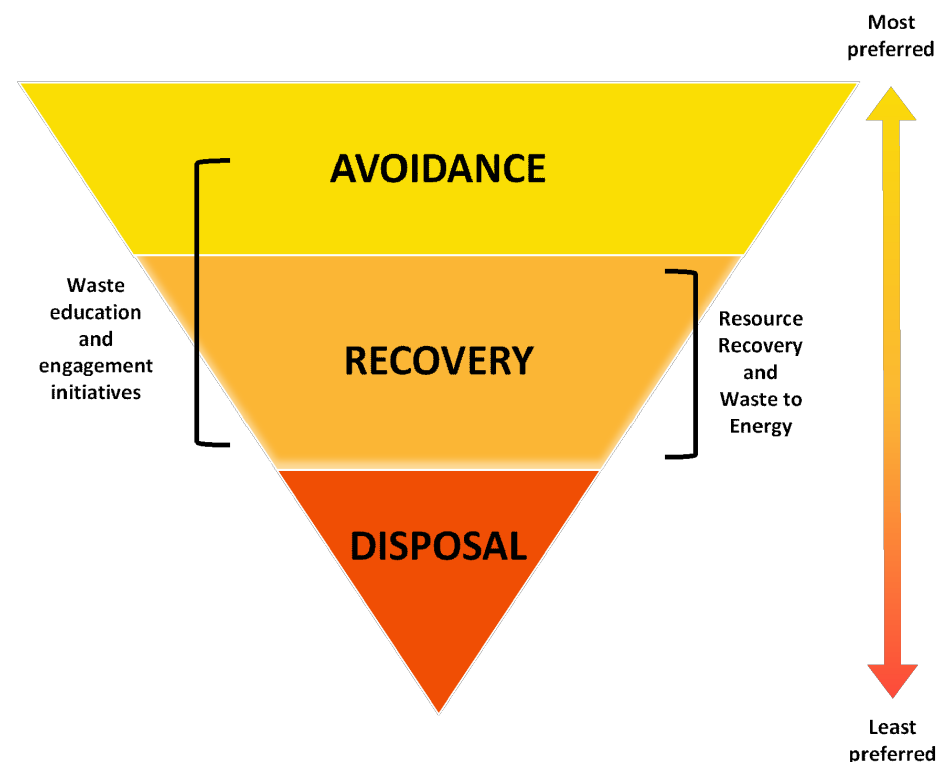


Figure 1. The Waste Hierarchy

Another guiding principle for environmentally-sustainable waste management is the Circular Economy. A circular economy is a regenerative system that involves sharing, reusing, repairing, refurbishing and recycling existing materials and products for as long as possible. This extends the life cycle of a product, which keeps waste to a minimum and creates opportunities for local jobs and investment through increased local recycling. It also minimises the costs and impacts of unnecessary transport and extraction of raw materials.

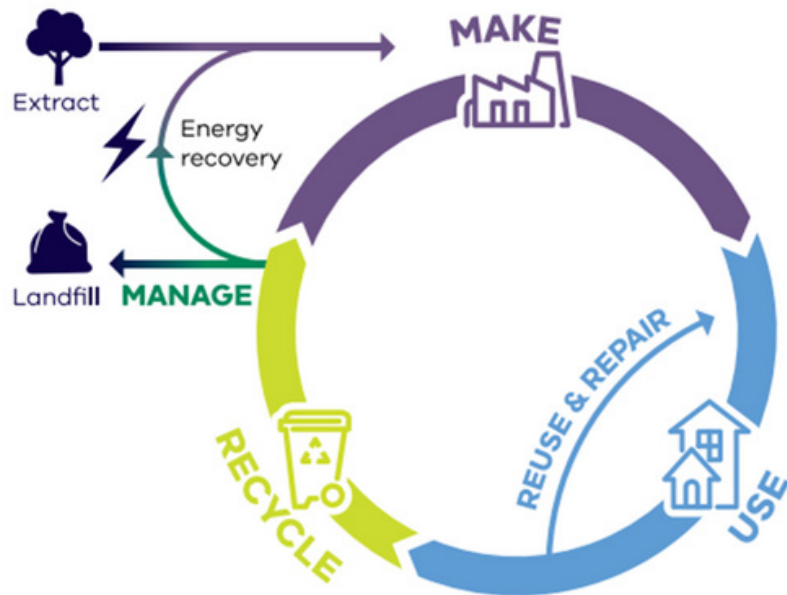


Figure 2. The Circular Economy

Source: The State of Victoria Department of Environment, Land, Water and Planning, 2020. *Recycling Victoria A new economy.*



Waste to Energy

As part of our commitment to striving for zero landfill, the City of Mandurah has committed to sending all of its residual household waste (rubbish that is leftover after recycling, that would normally be sent to landfill) to the Avertas Waste to Energy plant in Kwinana. This plant is currently under construction and is the first of its kind in Australia.

Waste to Energy is a process that diverts waste that would normally be sent to landfill, and converts it into an energy source such as heat, electricity or liquid transport fuels. At the Avertas Energy plant, waste will be burnt at very high temperatures in order to generate electricity. The solid ash produced through this process will be turned into bricks and pavers, or used as a construction aggregate.

Alignment with the Waste Hierarchy and Circular Economy

Waste to Energy is included in both the Waste Hierarchy and Circular Economy models under Energy Recovery, which is considered the last step of Recovery. This means Waste to Energy plays an important role in the responsible management of waste, when it is used as a final step after waste avoidance, reuse and recycling.

The delivery of this Waste Education and Engagement Plan, combined with resource recovery actions and Waste to Energy, is key to ensuring that we achieve our vision of moving towards zero landfill.

Environmental Information

When compared to landfill, the Avertas Energy plant will assist the City to:

- Divert approximately 45,000 tonnes of residual waste from landfill
- Reduce overall carbon emissions by approximately 45,000 tonnes

When fully operational, the plant will generate 36MW of baseload electricity that will be sent to the electricity grid and recover over 6,000 tonnes of recyclable metals. Based on calculations by Avertas, the City's contribution will be the equivalent of keeping approximately 9,450 cars off the road and powering 5,850 households every year.

Avertas is also working to develop technologies to reuse the plant's bottom ash by-product in construction products. The only remaining by-product is called Air Pollution Control Residue. It is a mixture of fine ash collected from exhaust gas filters and products from reaction of the flue gas treatment additives, which remove harmful gases and heavy metals from the exhaust gas before it is released out of the stack. This will be disposed of carefully in an appropriately engineered landfill.

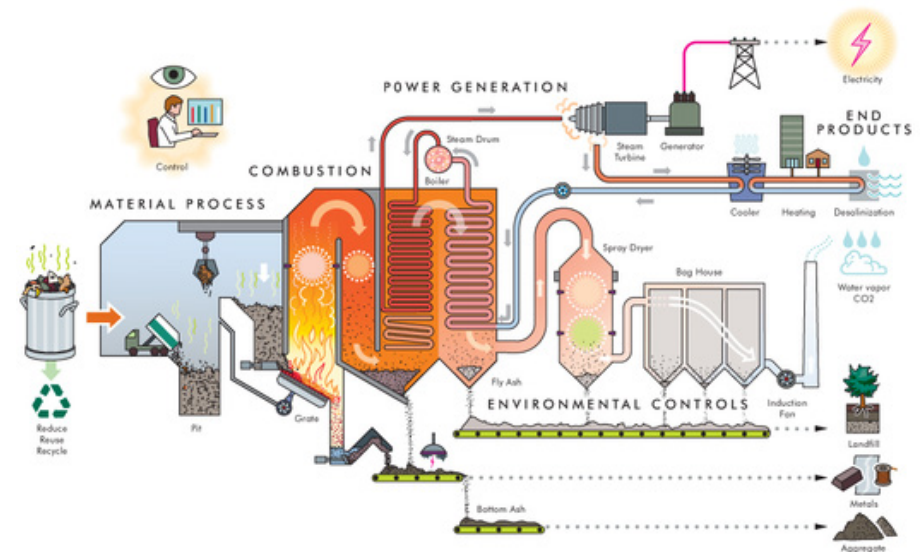


Figure 3. The Waste to Energy Process

Source: Deltaway, 2022. *Waste-to-Energy: How It Works*.



Our Waste Education Journey

This Plan is the first of its kind for the City and provides the starting point for a long-term waste education journey that encompasses sustainable living, environmental education and community engagement alongside topics such as waste avoidance and management, recycling, single-use plastic and the circular economy.

What we've achieved so far...

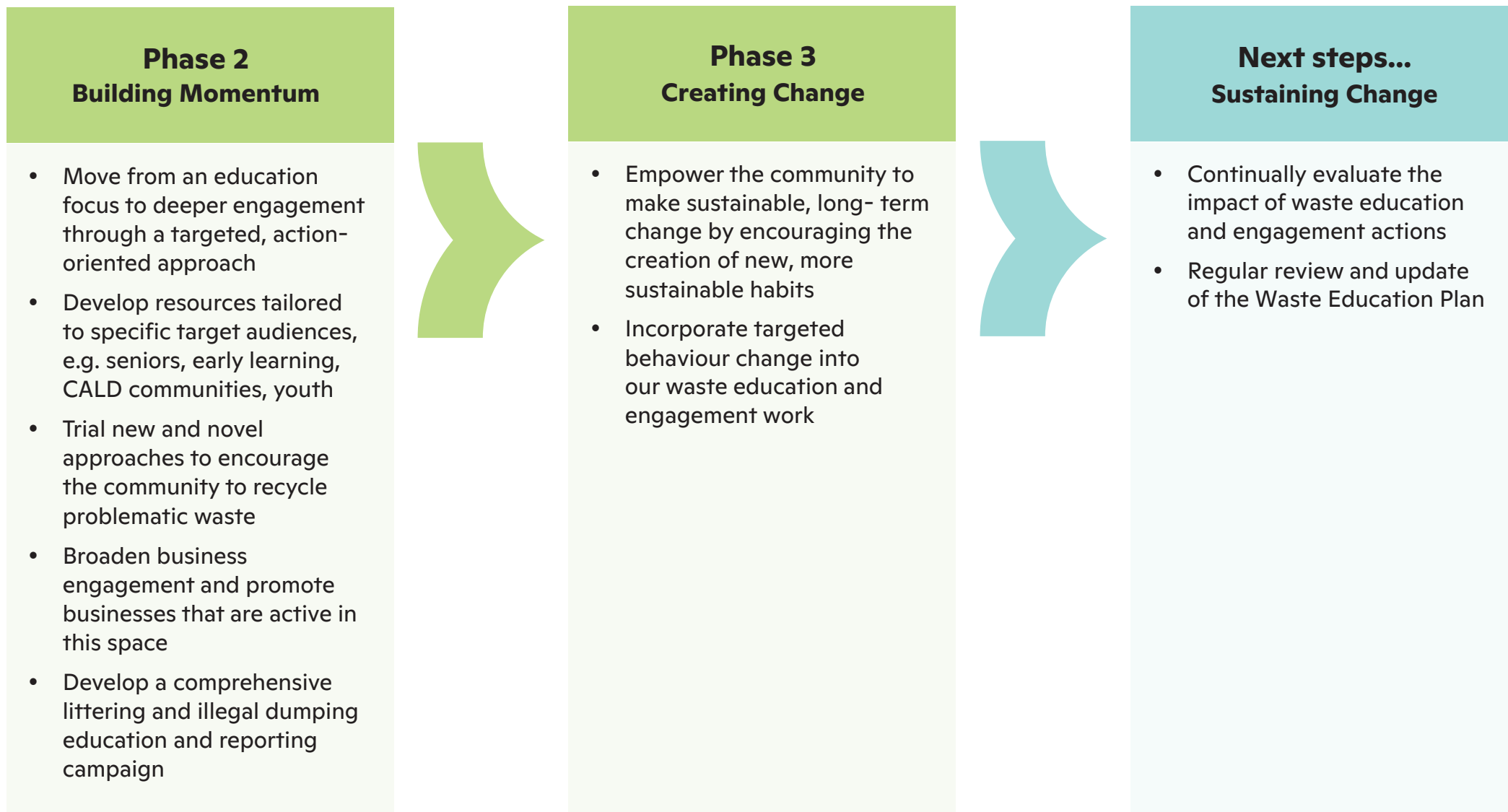
- For nearly two decades the City has supported community efforts to care for our environment, including clean-up days
- Supported the development of Coastal Waste Warriors which has collected over 100,000 pieces of litter from our coastal areas and recorded more than 2500 volunteers at their events
- Facilitated the Clean Waterways Group, which delivered a series of educational videos on accidental littering in our waterways and created a Bin Your Butt cigarette butt campaign
- Continued to address bin contamination through bin auditing and tagging
- Delivered community education workshops and developed educational videos targeting waste
- Provided an annual Waste and Recycling Guide for residents
- Delivered a school education program in partnership with Cleanaway
- Developed the Plastic Free Mandurah Simple Switches Guide to encourage our community to reduce their use of single-use plastic
- Delivered temporary collection days for problematic waste, and installed collection points in major facilities
- Committed to zero landfill by being the first Council to commit our waste to the Avertas Waste to Energy plant, the first of its kind in Australia



Phase 1 Setting the Foundations

- Review available waste education materials and consolidate key messages
- Identify gaps in current waste and recycling education
- Develop a comprehensive community education campaign and commence broadscale community education
- Continue to address problematic waste and kerbside bin contamination
- Encourage local businesses to participate in the DWER Plastic Free Places trial





Implementation Plan 2022-2025

Legend

WEO Waste Education Officer
ECO Environmental Communications Officer

The following actions have been identified to guide the delivery of the City's Waste Education Plan. All actions outlined in this plan will be measured against the City's waste targets, which are prescribed by the State Government's Waste Avoidance and Resource Recovery Strategy 2030.

Action	Objective			Assigned to	Timeframe	Key Performance Indicator	Cost	Funding Source
	Avoid	Recover	Protect					
Continue to conduct a biennial compositional waste audit of the residential rubbish and recycling bins		✓	✓	WEO, Waste Management, Cleanaway	2022/23	Next bin audit conducted in April 2023 Bin audits conducted every two years	\$35,000	Waste Alliance Budget
Continue to implement weekly Bin Intercept Surveys		✓		Cleanaway	Ongoing	Bin Intercept Surveys conducted weekly	NA	NA
Continue to implement the City's bin tagging program		✓	✓	Cleanaway	Ongoing	Bin tagging conducted for 10,000 visits per year		Waste Alliance Budget
Investigate the implementation of a WALGA-endorsed bin tagging app that captures the relevant data and photographs from bin tagging activities		✓	✓	WALGA	2022/23	Investigation of the app completed and recommendation forwarded to relevant staff for consideration	TBD	TBD
Review and, where appropriate, update data collection approaches and technology regarding bin contamination (e.g. Cleanview, numbered bins for units)		✓	✓	Cleanaway	Ongoing	Data collection approaches reviewed and recommendation forwarded to relevant staff for consideration Identified solutions implemented	NA	Waste Alliance Budget
Promote assisted bin service		✓		WEO, Community Development	Ongoing	Assisted bin service promoted through the relevant communications channels	NA	Existing Operational
Improve accessibility and inclusivity of waste education and volunteering <ul style="list-style-type: none"> Investigate braille stickers for waste bins Provide volunteering opportunities that are accessible and inclusive Educational videos with captions 	✓		✓	WEO, Community Development	Ongoing	Accessibility requirements incorporated into educational materials	NA	New Operational (included in \$50k allocation)
Develop and deliver a comprehensive Waste Education and Engagement campaign <ul style="list-style-type: none"> Identify key messages, target audiences and target materials (refer to focus materials outlined in the Waste 	✓	✓		Environmental Engagement, Waste Management	Ongoing	Campaign developed and delivery commenced by June 2024	\$35,000 per annum	New Operational (included in \$50k allocation)

Action	Objective			Assigned to	Timeframe	Key Performance Indicator	Cost	Funding Source
	Avoid	Recover	Protect					
<p>Avoidance and Resource Recovery Strategy 2030 and the Waste Authority's WasteSorted behaviour change campaign)</p> <p>Develop and promote solutions for reducing key contaminants and integrate problem items into waste education resources as required</p> <ul style="list-style-type: none"> • Review and enhance the waste management and recycling information on the City's website • Review and update existing educational videos as required, and develop new videos to address educational gaps • Deliver regular education workshops • Develop waste education resources for use at events, workshops and displays • Expand on the Simple Switches Guide to develop a sustainable/low-zero waste cleaning guide for residents • Regularly promote waste education opportunities, programs and incentive schemes to residents • Conduct community surveys to understand waste literacy and common behaviours • Promote waste education initiatives (such as Containers for Change, Plastic Free July) at City facilities or via the City's communications channels • Develop educational materials for Circular Economy 								
<p>Reduce the production of unnecessary single-use items, including merchandise and marketing material, single-use kitchen items (including tea and coffee, and paper towels)</p> <ul style="list-style-type: none"> • Provide staff education opportunities • Identify and promote recycling options • Investigate and implement environmentally friendly alternatives to marketing collateral, e.g. corflute signage, giveaways, cable ties, merchandise • Investigate a uniform recycling program 	✓	✓		WEO, Corporate Comms, Executive Manager Community Services	Ongoing	<p>Audit of single-use plastic and waste items across the City conducted and shared with staff</p> <p>Regular staff education opportunities, e.g. internal newsletter, information sessions, developed and delivered</p>	\$1,000	New Operational (included in \$50k allocation)

Action	Objective			Assigned to	Timeframe	Key Performance Indicator	Cost	Funding Source
	Avoid	Recover	Protect					
Continue to provide an annual Waste and recycling Guide for Mandurah residents <ul style="list-style-type: none"> Update the Waste and Recycling Guide to include the latest waste education terminology and address priority waste issues (e.g. illegal dumping, targeting common recycling contaminants) Identify additional distribution methods for the Waste and Recycling guide (e.g. Seniors Centre, Libraries etc) 	✓	✓	✓	WEO	Ongoing	Conduct yearly update of Waste and Recycling Guide Relevant waste education information and priority waste issues incorporated into the guide Waste and recycling Guide is made available in an increased number of facilities	\$10,000	Existing Operational
Develop a comprehensive waste and recycling information package for new builds	✓	✓	✓	WEO, Cleanaway	2024/25	New Resident Waste Education Pack developed	\$2,500	Existing Operational
Investigate the feasibility of providing a pop-up collection day for problematic waste (e-waste, batteries) each year		✓		Waste Management	2022/23	Assessment completed and recommendation forwarded to relevant staff for consideration	NA	NA
Trial the delivery of a pop-up collection day for eWaste, batteries and compact fluorescent light bulbs		✓		WEO, Waste Management	2023/24	One temporary collection day delivered Evaluation of the temporary collection day completed	\$2,500	New Operational (included in \$50k allocation)
Conduct a 12-month trial of the installation of recycling hubs for problematic wastes (ink cartridges, batteries, mobile phones, coffee pods, etc) in major Council facilities <ul style="list-style-type: none"> On completion of recycling hub trial, determine whether additional hubs should be installed in other locations, e.g. shopping centres 		✓		WEO, Waste Management	2022/23 onwards	Recycling hubs developed and installed in major Council facilities Volume of recyclable material collected for each stream monitored Evaluation of the trial completed and recommendation forwarded to relevant staff for consideration	\$5,000	Existing Operational
Investigate the feasibility of developing a mobile waste education and problematic waste collection trailer for use at community events		✓		WEO, Waste Management	2023/24 onwards	Assessment completed and recommendation forwarded to relevant staff for consideration	NA	NA
Develop a local incentive/rebate program for waste avoidance products, with a focus on composting bins, worm farms, and cloth nappies	✓	✓		WEO	2024/25, then ongoing	Incentive/rebate scheme developed and available to residents	\$10,000	New Operational (included in \$50k allocation)

Action	Objective			Assigned to	Timeframe	Key Performance Indicator	Cost	Funding Source
	Avoid	Recover	Protect					
Develop education resources to support community composting, worm farming and cloth nappies	✓	✓		WEO	2024/25	Education resources developed and publicly available	\$5,000	New Operational (included in \$50k allocation)
Trial the delivery of a Clothing Swap Event		✓		WEO	2023/24	Consultation with Community Development and relevant NFP sector completed Clothing Swap Event delivered and evaluation completed and forwarded to the relevant officers	\$1,500	New Operational (included in \$50k allocation)
Develop a City-wide Littering and Illegal Dumping Plan			✓	Waste Management, WEO	2023/24	Littering and Illegal Dumping Plan developed	NA	NA
Develop and implement a community education program to increase awareness and encourage behaviour change regarding illegal dumping <ul style="list-style-type: none"> Collate and utilise data on the types of materials that are illegally dumped to determine target audiences and potential reasons for this behaviour Conduct community surveys to understand illegal dumping behaviour Review and update the current reporting process to make it easier for the community to report illegal dumping 			✓	WEO, Waste Management		Increase in community reporting of illegal dumping Reduction in instances of illegal dumping	\$15,000	New Operational (included in \$50k allocation)
Continue to partner with community groups to deliver regular clean-up events, and promote clean-ups through the City's networks	✓	✓	✓	WEO, Cleanaway, Environmental groups, ECO, Executive Manager Community Services	Ongoing	Collected rubbish is picked-up and disposed of by Cleanaway Clean-up opportunities promoted through the City's communications channels	NA	NA
Connect volunteer groups with the local disability sector and networks to promote volunteering and clean-up opportunities		✓	✓	WEO, Executive Manager Community Services	2023/24	Clean-ups promoted via Access & Inclusion newsletter Volunteering opportunities showcased at events e.g. Disability Expo and International Day of People with a Disability	NA	NA

Action	Objective			Assigned to	Timeframe	Key Performance Indicator	Cost	Funding Source
	Avoid	Recover	Protect					
Work with Coastal Waste Warriors to design a community litter education workshop			✓	WEO, Coastal Waste Warriors	2023/24	Community workshop designed 2 workshops delivered each year	\$1,000	Existing Operational
Encourage local residents to collect litter in their neighbourhoods	✓	✓	✓	WEO, Environmental groups	Ongoing	Adopt a Spot and local clean-ups promoted to community City to provide free bags to residents interested in collecting rubbish	NA	Existing Operational
Collaborate with Keep Australia Beautiful on community education opportunities			✓	WEO	Ongoing	Keep Australia Beautiful education opportunities promoted via the City's communication channels	NA	NA
Investigate ways to address construction site litter			✓	WEO	Ongoing	Evaluation of construction site litter behaviours completed and recommendation forwarded to relevant staff for consideration	NA	NA
Continue to support the Clean Waterways Campaign		✓	✓	WEO, Environmental groups	Ongoing	Project Steering Group to meet once per year	\$2,500	Existing Operational
Support the Reel It In/Luca's Legacy annual clean-up event			✓	WEO, Environmental groups	Ongoing	Event delivered annually	\$500	Existing Operational
Develop educational resources for Dog Poo Bags and Dispensers			✓	WEO	2023/24	Educational resources developed and distributed	\$500	Existing Operational
Install and promote Containers for Exchange points on City bins		✓		Waste Management	2022/23 onwards	Bin racks installed on bins in high-profile areas	NA	NA
Collaborate with Containers for Change on community education opportunities		✓		WEO, Executive Manager Community Services	Ongoing	Develop a Containers for Change policy position for the City. Containers for Change education opportunities promoted via the City's communication channels	NA	NA
Support and promote the DWER Plastic Free Places trial	✓		✓	WEO	2022/23	Plastic Free Places trial promoted via the City's communication channels	NA	NA
Encourage local businesses to participate in the DWER Plastic Free Places trial	✓			WEO	2022/23	Plastic Free Places promoted through the City's local business directories	NA	NA
Develop plastic minimisation resources and promote through the City's website and communication channels	✓	✓	✓	WEO, ECO	Ongoing	Education resources developed and promoted	\$2,500	New Operational (included in \$50k allocation)

Action	Objective			Assigned to	Timeframe	Key Performance Indicator	Cost	Funding Source
	Avoid	Recover	Protect					
Engage with local businesses on waste, recycling and single-use plastic, and promote businesses that are actively reducing their waste consumption and increasing their recycling efforts	✓	✓	✓	WEO, Transform Mandurah	2023/24, then ongoing	<p>Increase the number of businesses that have been engaged in waste and recycling education programs</p> <p>Develop a local business directory that showcases businesses who have actively reduced their waste consumption and increased their recycling efforts</p>	\$5,000	NA
Inform schools of opportunities to get involved with waste education and grant programs (e.g. Cleanaway education program, WasteSorted Schools, Clean Schools, Waste to Energy Education Centre tours)	✓	✓	✓	WEO	Yearly	Opportunities identified and compiled, and information forwarded to local schools yearly	NA	NA
Continue to deliver a local Primary School Waste Education Program	✓	✓		Cleanaway	Ongoing	10 local Primary Schools engaged in program each year	NA	Waste Alliance Budget
<p>Identify the best approach for Early Years' waste and recycling education opportunities, considering:</p> <ul style="list-style-type: none"> City-run incursions The utilisation of existing programs available to the City (e.g. Little Green Steps) Develop and implement a waste and recycling information package for Early Learning Centres 	✓	✓	✓	WEO, Cleanaway	2024/25, then ongoing	<p>Assessment completed and recommendation forwarded to the relevant staff for consideration</p> <p>Implementation of identified solutions commenced</p>	\$2,000	New Operational (included in \$50k allocation)
Consider the development of a suite of education modules on the Greenius online platform for Early Years and Primary levels	✓	✓	✓	WEO, Cleanaway	2023/24	<p>Assessment completed and recommendation forwarded to the relevant staff for consideration</p> <p>Agreed-upon outcome implemented</p>	TBD	New Operational (included in \$50k allocation)
<p>Develop a proposal for the renaming of the Waste Management Centre to more accurately reflect its alignment to resource recovery</p> <ul style="list-style-type: none"> Upgrade signage at the facility to reflect the new name and brand 		✓		Waste Management, WEO, ECO, Corporate Comms		<p>Proposal developed and recommendation forwarded to the relevant staff for consideration</p> <p>New signage developed and installed</p>	\$5,000-\$10,000	New Operational (included in \$50k allocation)

Action	Objective			Assigned to	Timeframe	Key Performance Indicator	Cost	Funding Source
	Avoid	Recover	Protect					
Join and deliver the Grow It Local program to promote locally grown food and environmentally-responsible living <ul style="list-style-type: none"> • Maintain an annual program of Grow It Local opportunities delivered by the City (such as workshops on growing vegetables) • Implement promotional campaign encouraging residents to become a member of Grow It Local and register their patch • Integrate waste education into the delivery of Grow It Local 	✓	✓		Executive Manager Community Services	2 years, 2022-2024	Mandurah Grow It Local program launched in October 2022. Targets: <ul style="list-style-type: none"> • Increase area under cultivation • Increase number of Grow It Local members with composters and worm farms • Increase food waste diversion (kg/week) • 2 waste education workshops delivered, or promoted to Grow It Local participants, each year 	\$19,000 per year	Existing Operational
Develop guidelines for Sustainable Procurement	✓			WEO, Procurement Services	2024 onwards	Sustainable Procurement Guidelines developed	NA	NA
Embed waste reduction policies into community grants	✓	✓		Executive Manager Community Services, Transform Mandurah	2024 onwards	Waste reduction policies included in community grants on an ongoing basis	NA	NA
Identify and implement measures to reduce waste, including food waste, from City-run events/workshops/programs <ul style="list-style-type: none"> • After school drop-in food and wrappers • Balloons at events • Catering (internal and external) • City of Mandurah Events • Youth events • Council dinners • Council meetings and workshops • Expos and conference show bags • Kitchenette waste • Seniors Centre • Team building BBQs • Programs that involve crafts, food and transport 	✓			WEO, Executive Manager Community Services, Festivals and Events, OMAC, Recreation Centres, Recreation Services (for local sporting clubs)	Ongoing	Measures to reduce waste, including food waste, from City-run events / workshops/programs are identified and implemented on an ongoing basis	NA	NA

Action	Objective			Assigned to	Timeframe	Key Performance Indicator	Cost	Funding Source
	Avoid	Recover	Protect					
Reduce operational waste at City facilities	✓			Executive Manager Community Services, Recreation Centres	Ongoing	Opportunities to reduce waste identified and implemented	NA	NA
Reduce waste generation in all Seniors activities <ul style="list-style-type: none"> • Sustainability policy or committee • Raffle prizes • Provide compost/collection point for compostable takeaway containers or information on where they can be composted • Arts and Crafts using recycled materials • Workshops • Promote second-use table 	✓	✓		Executive Manager Community Services, Seniors and Community Centre	Ongoing	Opportunities to reduce waste identified and implemented	NA	NA
Where appropriate, highlight waste education and encourage innovative and creative use of waste in art exhibitions and programs	✓	✓	✓	Executive Manager Community Services	Ongoing	Opportunities for waste education through themed exhibits are identified and implemented on an ongoing basis	TBC	Existing Operational
Develop a policy/procedure for sustainably repurposing and/or discarding library stock		✓		Executive Manager Community Services	2023/24	Program/procedure developed and delivered	NA	NA
Develop themed exhibits at libraries about waste	✓	✓		Executive Manager Community Services	Ongoing	Opportunities for waste education through themed exhibits are identified and implemented on an ongoing basis	\$1,000	New Operational (included in \$50k allocation)
Empower youth to become leaders in waste avoidance, reduction & recovery (e.g. Junior Council, Youth Advisory Group)	✓	✓		Executive Manager Community Services, WEO	Ongoing	Waste education workshop delivered to each new Junior Council and Youth Advisory Group	NA	NA

