CITY OF SOUTH PERTH

DRAFT WASTE AND RESOURCE MANAGEMENT PLAN

2019-2024









The City of South Perth Waste Resource and Management Plan (WRMP) defines the City's waste and resource management goals and the proposed actions to achieve those goals. It is aligned with the targets of the WA State Government in all areas except for the three bin system, where the City is already contractually committed to Waste to Energy as the solution to landfill.

Waste minimisation, resource recovery and recycling are the cornerstones of sustainable waste management and can be optimised through a plan that supports technology and infrastructure development, community education and behaviour change, and complementary decision-making processes.

The State Government, through its WA Waste Strategy 2030, has set ambitious targets for residential waste disposal and recycling across the Perth metropolitan area. The Strategy released in 2019 builds on the targets of the previous strategy.

The landfill diversion target for municipal waste increased from 65% by 2020 to 85% by 2030. The State Government has introduced a new target for 75% material recovery by 2030. Currently, residential recycling in the City represents just 22-26% of all household waste generated. The City's performance is aligned with the state's overall waste trends, with Western Australians generating the highest levels of waste per capita at 3.2 tonnes annually. The State also has the lowest rate of recovery compared to the national average for all waste products (with the exception of organic waste). To meet the WA Waste Strategy 2030 targets, the City will need to facilitate and support positive behaviour change through a rigorous and public community waste education program.



While waste generates just 3-5% of global greenhouse gas emissions, waste reduction offers the potential to minimise emissions across many other highly polluting sectors such as transport, commercial and industrial activities.

In order to respond to these many challenges, the City must adopt a strategic approach that integrates the various elements of waste management and continues to deliver a reliable and cost effective service to its residents. The Waste and Resource Management Plan offers such an approach, guiding waste and resource management into the future.

The WRMP must be developed within the parameters of a strict regulatory framework, national, state and local policies and the WA Waste Strategy 2030.

The WRMP sets out key objectives and principles, which support the goals of:

- Minimising waste
- Increasing resource recovery and recycling
- Delivering community education for sustainable behaviour change
- Continuing to deliver a cost effective and equitable service to the residents of the City of South Perth.

In order to achieve these objectives, the WRMP contains an Action Plan that outlines key action areas on which the City will report progress annually to Council.



The City is facing major challenges in delivering effective and sustainable municipal solid-waste management. Traditional forms of waste disposal are rapidly changing as metropolitan landfill sites become scarce, waste disposal costs rise, climate change and sustainability issues increase, and organic waste and recycling technology is continuously updated. Waste facilities and services must meet the needs of the environment and community into the future, whilst simultaneously reducing levels of waste generation. The community has a demonstrated awareness and concern for the environment and has an expectation of better management of waste and improved resource recovery. The City's role is to provide the services and education that empowers the community to collectively achieve these goals.

Responsible and effective management of waste and resource recovery in the City can only be achieved through effective collaboration between the City and its residents and ratepayers.

The City can achieve these aims through a strategic commitment to waste management, which will guide operational activities, deliver improved waste services and support sustainable behaviour change across the City and the community.

The WRMP outlines how the City will achieve its objectives and is aligned with the targets of the WA Waste Strategy 2030. The WRMP is guided by a set of five key objectives, underpinned by eight principles which inform strategic action areas.





The City's approach to waste management is bound by a strict regulatory framework, including a number of Acts, Policies and Regulations, and supported by state strategy.

WESTERN AUSTRALIA'S WASTE STRATEGY

The Waste Authority is an independent statutory tribunal created by the Minister for Environment to coordinate and implement the State's Waste Strategy. The most recent update being the WA Waste Strategy 2030 with its vision that "Western Australia will become a sustainable, low-waste, circular economy in which human health and the environment are protected from the impacts of waste".

The Strategy contains three objectives with measurable targets, which are:

AVOID

- Western Australians generate less waste
- 2025 10% reduction in waste generation per capita
- 2030 20% reduction in waste generation per capita

RECOVER

- Western Australians recover more value and resources from waste
- 2025 Increase material recovery to 70%
- 2030 Increase material recovery to 75%
- · Recover energy only from residual waste

PROTECT

- Western Australians protect the environment by managing waste responsibly
- 2030 No more than 15% of waste generated in Perth and Peel region is landfilled
- 2030 All waste is managed and/or disposed to better practice facilities



WASTE AVOIDANCE AND RESOURCE RECOVERY ACT 2007

The objectives of this Act are to contribute to sustainability and the protection of human health and environment. This is achieved through efficient resource use, recovery and waste avoidance, reduced unnecessary consumption and environmental harm.

LOCAL GOVERNMENT ACT 1995

This provides a framework for the administration of local government in Western Australia, including setting out the functions of local governments. The Act also outlines the role of sustainability in local government, by stating that "In carrying out its functions a local government is to use its best endeavours to meet the needs of current and future generations through integration of environmental protection, social advancement and economic prosperity".

CITY OF SOUTH PERTH HEALTH LOCAL LAWS 2002

This local law is to regulate sanitation and hygiene within the City, including the treatment of general waste.

WASTE LOCAL LAW 2017

This local law is to regulate the storage, collection and disposal of waste and refuse from residential premises, and on waste facilities in the City.

POLICY P212 WASTE MANAGEMENT

This policy supports effective and comprehensive waste disposal service for the City's residents and ratepayers, a cost effective and efficient kerb side collection service and a recycle and recovery driven waste facility for the community.

WASTE GUIDELINES FOR NEW DEVELOPMENTS

These guidelines assist incorporation of waste management into developments within the City of South Perth. The guidelines ensure economical and efficient waste collection services can be provided to all ratepayers and waste is disposed of in a sanitary manner.



The City undertook extensive community consultation in preparing its current Strategic Community Plan 2017-2027 on a range of priority focus areas including waste management. The City has committed to address resource management and climate change, to promote and implement sustainable waste management practices.

The City's Corporate Business Plan identifies many strategic initiatives to fulfil this commitment to:

- Explore opportunities to increase the level of waste education within the City
- Complete a Waste Management Plan
- Contribute to the development of a Regional Waste Management Strategy
- Implement the recommendations of the adopted Collier Park Waste Transfer Station (now City of South Perth Recycling Centre) Review.

This Waste and Resource Management Plan seeks to address strategic initiatives within the action plan of this document.

The Rivers Regional Council (RRC), of which the City is a member, has developed a Strategic Waste Management Plan to guide waste management for its local government members. This seeks to:

- Increase community awareness of waste generation and management
- Increase awareness of sustainable waste management practices
- Involve the community in taking action towards a Zero Waste future
- Target specific community groups to boost awareness and involvement.

The objectives contained within this WRMP remain relevant to the City of South Perth and its role in supporting sustainable behaviour change.

PRINCIPLES

The following principles have been identified to guide waste management in the City and underpin the Action Plan. The principles have been drawn from the City's waste engagement activities and represent the community's key areas for concern as communicated to the City over recent years. When appropriate, the community and stakeholders will be engaged on projects and actions of this plan.



Figure 2: WRMP Principles



KERB SIDE COLLECTION SNAPSHOT

Since 2010/11 general waste to landfill collected from households has increased from 13,494 tonnes annually to 14,010 tonnes in 2017/18, with a peak of 14,692 tonnes in 2014/15. Recycling during this time has remained steady at an annual average of iust over 3,400 tonnes. This figure amounts to just 22-26% of total household waste recycled.

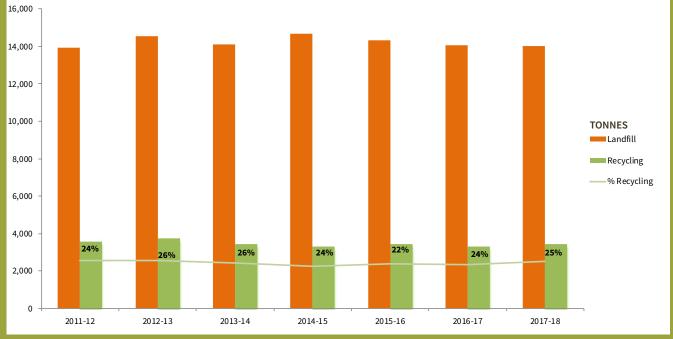


Figure 3: Residential waste data from kerb side collection demonstrates low presentation of recyclables by residents

RECYCLING CENTRE SNAPSHOT

The South Perth Recycling Centre (formerly Collier Park Transfer Station) provides a disposal point for residential bulk waste traditionally collected at domestic verges. Since 2010/11, the Centre has gradually decreased waste to landfill from 1,547 tonnes in 2010/11 to 1,155 tonnes in 2017/18. During the same period, the centre has increased its resource recovery and recycling from 720 tonnes to 1,551 tonnes.

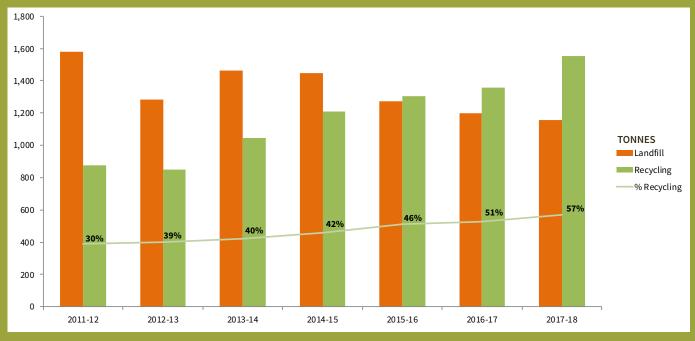


Figure 4: Waste disposal trends at the South Perth Recycling Centre shows increase in recycling due to on site source separation

ANNUAL VERGE SIDE COLLECTION SNAPSHOT

The City provides two green waste (spring/autumn) and one hard waste collection per household per year to maximise the recycling potential of the verge side collection. As a result, waste to landfill from verge side collections has decreased, while recycling rates have increased.

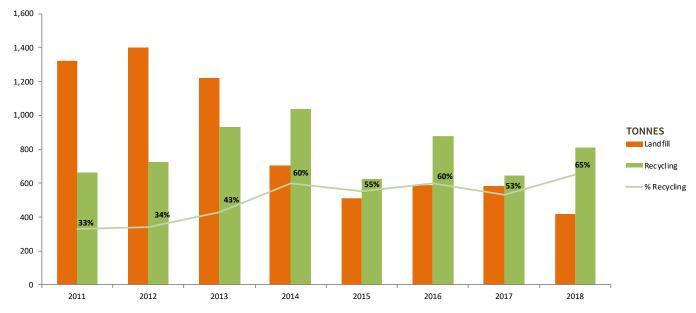


Figure 5: Verge collection waste and recycling data demonstrates increased recycling due to modified collection.



With the growing focus on the environment, there has been an evolution from waste management designed primarily to protect public health to a system of resource management where materials are valued for recovery and reuse. Waste management is now more integrated with sustainability and climate change.

The City currently delivers a range of waste services:

KERB SIDE COLLECTION

Kerb side waste collection is the most frequent and visible interface that ratepayers have with the City's waste management services. The City provides a general waste and recycling collection service (by contractor) to households and businesses. The majority of residential properties are serviced by a 240 litre green-lid waste bin and a 240 litre yellow-lid recycling bin. Residents in multi-unit developments often use larger unit bins. As demonstrated in the community snapshot (page 10), kerb side collection presents one of the greatest opportunities for improvement in resource recovery rates.

VERGE SIDE COLLECTION

The City provides multiple verge side collections each year, which are key opportunities for residents to responsibly dispose of waste not suitable for the kerb side collections. However, several issues are apparent with verge side collections; operational occupational health and safety, cluttered streets and the removal of high value material prior to collection increase the City's costs and adversely impact on resident amenity. In addition, with increasing multi-unit developments it is not an easily accessible service for those with minimal verge access. As a result, some local governments are now introducing on-call arrangements to counter these issues. The City will consider alternative options for bulk collection.

RECYCLING CENTRE

The City owns and operates the City of South Perth Recycling Centre (SPRC). The SPRC is a multi-stream recycling facility that receives general waste, paper and cardboard, plastics, green garden organics, metals, whitegoods, oils, tyres, e-waste and mattresses. The waste is sorted at drop off which maximises efficiency and resource recovery.

MULTI-UNIT DEVELOPMENTS (MUDs)

A number of MUDs are currently under construction in the City. This presents significant challenges in providing waste services to the residents of these buildings. Many of the issues result from poor design of access for collection vehicles and a lack of storage space provided for separate waste and recycling bins or hard rubbish. There is also often a lack of kerb side space for bin presentation, impacting on amenity and resulting in limited residential recycling opportunities. The City has a number of older MUDs that do not have recycling infrastructure, which reduces the potential for waste and resource recovery. The City needs to establish a consistent approach to the design and servicing of MUDs.



LITTER AND STREET BINS MANAGEMENT

The City provides approximately 440 street litter bin services across the City in public spaces and facilities. The bins are regularly monitored to ensure they meet demand, without exceeding service requirements. The City has a current need to improve on the recycling opportunities provided across its facilities and public spaces.

The City actively cleans up illegally dumped material, which is an environmental nuisance, compromises public amenity and is a high cost activity. Infringements are issued where appropriate.

RESIDENTIAL RECYCLING SERVICES

The City provides many low cost or no charge recycling services to residents. These include disposal points for batteries and mobile phones, clothing recycling bins in public places (in partnership with charity organisations) and reusable recycling bags to residents to collect and dispose of green waste. The green waste product is then mulched and available to residents free of charge. Items such as tyres, mattresses, e-waste and larger recyclables can also be disposed of responsibly by the community.



To reduce waste disposal to landfill, increase resource recovery and support the community in adopting sustainable behaviour change, the City will enhance waste and environmental education within the community.

Education and awareness programs, in partnership with waste contractors, play a critical role in the bid to further educate residents about waste management. The current approach to waste education focuses on encouraging residents to view waste as a resource and provides them with the knowledge and skills required to participate effectively in waste avoidance and resource recovery. The City can further promote and enhance better waste practices through greater community education. This will result in reduced waste to landfill and increased recycled materials.

Reduced recycling contamination through education will be a benefit to the community as materials will be more likely to be recycled and less costly to sort and dispose, reducing costs to ratepayers.

The City's annual budget includes a waste education allowance. This allows for a number of initiatives to be delivered to the community incorporating sustainable living and waste education such as:

- Cleanaway Schools Program delivers waste education to young people
- Waste Guide an annual guide for residents on minimising waste and optimising recycling for residents
- Community Events partnerships undertaken at community events with external stakeholders to optimise recycling
 practices e.g. provision of recycling bins and general waste bins; partnership with Millennium Kids (a not-for-profit youth
 organisation that empowers the young to lead social change and promote greater care for the environment); and food stalls
 are encouraged to recycle their waste and use biodegradable food containers (coffee cups, cutlery)
- Other Initiatives event banners and signage used by the City are re-used where possible; and/or provided to relevant external organisations to re-purpose such as REmida (a not-for-profit community organisation that reuses industry waste for creating sustainable artworks).

SUSTAINABILITY AND CLIMATE CHANGE

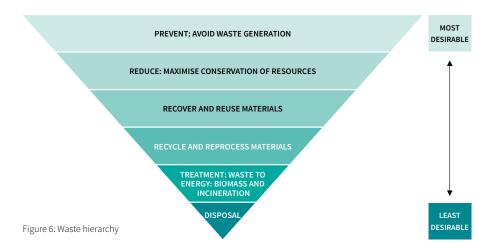
Effective and efficient waste management is fundamentally integrated with approaches to sustainability and climate change. Waste accounts for 3-5% of all man made greenhouse gas emissions globally and by minimising waste generation and increasing resource recovery, emissions in other sectors of the economy can be avoided. More than three quarters of emissions from waste comes from the breakdown of organic waste in landfill as methane, which has 21 times the global warming potential of carbon dioxide. These emissions can be avoided and reduced through a mix of policy measures to foster changes in waste management and behaviour change. The Waste to Energy plant will reduce the emissions from residual waste when compared to landfill.

Sustainability approaches recognise that resources are finite and waste minimisation means a commitment to

consume less. The WRMP outlines key focus areas for sustainability and waste management, providing a clear framework for the future.

WASTE TO ENERGY

The City teamed up with other Rivers Regional Council members (Mandurah, Armadale, Gosnells, Murray, Serpentine Jarrahdale) to attract a new system to deal with the growing issue of waste handling. This came about as a result of a previous State Government waste strategy that called for an end to the dependence on the unsustainable practice of landfilling by 2020. With increasing pressure on landfill capacity combined with efforts to reduce landfill levels, waste-to-energy represents a significant opportunity for the generation of affordable green power.



CIRCULAR ECONOMY

A circular economy is a closed loop system where the goal is to maintain as much value as possible from resources or materials. That means preventing waste by making products and materials more efficient and reusing them.

CIRCULAR ECONOMY COLLECTION PRODUCTION NOLINGUESE COLLECTION

LINEAR ECONOMY

The traditional linear economy based approach to resources of 'TAKE-MAKE-USE-DISPOSE' is unsustainable and costly to the environment and consumers.

RESOURCE EXTRACTION PRODUCTION DISTRIBUTION CONSUMPTION WASTE



PRINCIPLE 1: MINIMISE WASTE

The City will prioritise waste management and education practices aimed at supporting the greatest environmental outcomes. The waste hierarchy implies that since all waste management options have some impact on the environment, waste avoidance through better design and decision making is the primary focus. Remaining waste should then be treated by re-use, recycling and other recovery and treatment techniques. Disposal to landfill is at the bottom of the hierarchy and should only be considered once all other options are exhausted.

ACTION AREAS

Action	Timeframe	Category	Benefit	Measure of success
Embed the waste hierarchy in relevant City plans, strategies, policies and procedures	2019/20	Operational Budget	A consistent and coordinated approach to waste management	Waste hierarchy principles feature in relevant City documentation
Set corporate and community targets for waste minimisation	2019/20	Operational Budget	Tangible measure of progress towards set goals	Council adoption of corporate and community waste minimisation targets
Detail the City's commitments to waste minimisation and diversion from landfill in relevant tender documents and contracts	2019/20 and ongoing	Operational Budget	Reduced waste to landfill, increased resource recovery	100% of waste management tender documents to include waste minimisation and diversion from landfill targets

PRINCIPLE 2: MAXIMISE BENEFITS

The City's approach to waste management supports effective resource recovery and reclamation of materials. Resource recovery provides opportunities to maximise City, community and environmental benefits.

Action	Timeframe	Category	Benefit	Measure of success
Rationalise bin sizes and collection frequency to encourage recycling, reduce waste and improve safety	2020/21	Operational Budget	Improve residential waste management, resource recovery and recycling rates	Report to Council detailing changes in size of bins/ frequency of collection needed. Minimal bins over 660 litres
Complete an audit of the residential waste service	2019/20	Capital Budget	Improved residential waste service delivery	Audit completed
Implement recycling bins in the City's facilities and public places	2019/20	Capital Budget	Increased resource recovery rates and community awareness	Recycling implementing report to Council on outcomes
Review the current verge side collection and explore alternative options such as on call service	2019/20	Operational Budget	Improved service delivery, resource recovery and amenity. Improved OSH benefits	Review complete, recommendations made to Council
Investigate what role the City can take to support the Container Deposit Scheme	2019/20	Operational Budget	Improved resource recovery	Investigation complete, recommendations made to Council

PRINCIPLE 3: ACCOUNTABILITY

Progress against action areas and outcomes must be measured and reported to improve waste management at the City. This will ensure a system of continuous improvement and public confidence.

ACTION AREAS

Action	Timeframe	Category	Benefit	Measure of success
Review WRMP actions annually	Annually	Operational Budget	Improved accountability	Review undertaken and progress reported to Council and the public
Establish a more accurate recording system and data collection framework for all waste streams	2019 onwards	Operational Budget	Reduced cost, improved service delivery, increased accountability	Recording system and data collection framework established
Internal Operational Workshop	Annually	Operational	Improved collaboration within departments	Attendance, improved collaboration
Investigate participating in a bin tagging trial implemented by WALGA	2020/21	Capital Budget	Improved resource recovery rates and lower contamination rates	Involvement in bin tagging trial

PRINCIPLE 4: COLLABORATION

In 2015, the City engaged a consultant to review opportunities for waste management resource sharing in conjunction with the Town of Victoria Park. The review made several recommendations to combine waste management solutions beyond municipal boundaries. The City also belongs to the Rivers Regional Council, which oversees waste management on behalf of its local government members with a specific focus on the Waste to Energy plant.

Action	Timeframe	Category	Benefit	Measure of success
Review the opportunity for Waste Management Resource Sharing across Councils	2019/20	Operational Budget	Improved service delivery	Review undertaken, recommendations made to Council for adoption
Seek partnerships with surrounding Councils to use the Recycling Centre to improve resource sharing	2019/20	Operational Budget	Streamlined service delivery for residents, improved cost effectiveness of Centre	Feasibility study complete, recommendations made to Council
Participate in regional working groups for multi-residential development to ensure industry best practice is maintained	Ongoing	Operational Budget	Best practice in service delivery maintained	>90% customer satisfaction

PRINCIPLE 5: FINANCIAL RESPONSIBILITY

The City currently operates its waste management services with value for money for residents and full cost recovery on expenses. As landfill levies increase and technology progresses, the City must continue to exercise financial responsibility over the delivery of its services. To date, the City's approach to waste management has performed strongly to achieve a cost effective waste service reflected directly in an economic return for ratepayers.

ACTION AREAS

Action	Timeframe	Category	Benefit	Measure of success
Implement procedures for setting waste gate fees aligned with the user pays principle	2019/20	Operational Budget	Reduced waste disposal costs, improved financial outcomes	Procedures implemented
Review costing structure for waste operation	2019/20	Operational Budget	Improved cost effective services	Economic modelling complete
Clear long term plan for major asset upgrade or replacement	2019 onwards	Capital Budget	Best practice service delivery	Improved community infrastructure
Investigate economic modelling for waste costing structures	2019 onwards	Staff Time	Equitable waste system for ratepayers	Cost effective waste service, customer satisfaction

PRINCIPLE 6: INNOVATION

New technologies in waste management drive innovation and have many potential benefits, including improved service delivery, reduced costs and sustainability. The City will consider options and opportunities to improve its current level and type of service delivery as part of its WRMP, with a particular focus on multi-unit developments (MUDs).

Action	Timeframe	Category	Benefit	Measure of success
Maintain a consistent approach to the servicing of Multi-unit Developments (MUDs).	Ongoing	Operational Budget	Consistent service delivery	MUDs guidelines to be publicly available and applicants to be informed of these through the planning process
Review MUDs servicing guidelines annually	Ongoing	Operational Budget	Industry best practice is maintained	Annual review complete
Review Waste to Energy in relation to WA Waste Strategy 2030	Up to 2022	Operational Budget	Industry best practice is maintained and contractual risks minimised	City practices meet Waste to Energy contractual requirements and in line with the WA Waste Strategy 2030
Investigate how new and existing technology can improve the City's waste program	Ongoing	Operational Budget	Improved service delivery, reduced cost	Investigation complete, recommendations made to Council

PRINCIPLE 7: SUSTAINABILITY

Effective waste management and education plays an important role in delivering sustainability in the City. Benefits include resource use and recovery, emissions from landfill, public health and sustainable behaviour change. The City has a responsibility to protect the environment and public health, integrating this into waste management.

ACTION AREAS

Action	Timeframe	Category	Benefit	Measure of success
Minimise illegal dumping and litter	Ongoing	Staff time	Reduced illegal dumping, improved public amenity	Best practice management and education strategies reviewed annually
Develop guidelines, operational plan and cost structures for event recycling	2019/20	Staff time	Improved resource recovery and recycling at events	Guidelines, plan and cost structure developed and implemented
Develop guidelines, operational plan and cost structures to support responsible management of residential and commercial waste by the community	2019/20	Staff time	Reduced waste generation, maximise recycling opportunities	Meeting state objectives
Continue to support community environmental education workshops	Ongoing	Program delivery costs	Improved community engagement and awareness	Annual delivery of community environmental education workshops
Include waste management in the City's sustainability policy and strategy	2019 onwards	Staff time	Waste management strategically guided	Waste management incorporated into Sustainability Strategy and Policy

PRINCIPLE 8: SHARED RESPONSIBILITY

To improve waste management in the City, the WRMP must include community participation, education and behaviour change. These are vital components of effective and sustained improvements to waste management and can not be separated from City approaches to sustainability and climate change.

Action	Timeframe	Category	Benefit	Measure of success
Have an effective waste education program	2019/21	Staff time	Improved community education and behaviour change	Education materials updated annually and disseminated to local schools and tertiary institutions. Community waste targets met
Investigate appointment of a Waste Education or Waste Project Officer	2019 onwards	Full time or FTE	Implementation of waste management actions outlined in the WRMP, improved service delivery and outcomes	Resources allocated for officer/ to be officer employed
Continue to partner with local community groups, sporting clubs and other stakeholders to undertake recycling projects	Ongoing	Staff time	Improved community engagement, action and awareness	Number of local community groups, sporting clubs and stakeholders involved in recycling projects
Implement waste data system	2019 onwards	Staff time, program administration	Inform decision making and provide greater transparency to the community	Waste data system implemented



IMPLEMENTATION

TIMELINE

The WRMP will be reviewed annually to measure progress against its Action Plan. Findings will be presented to Council. It is intended that this document will evolve as actions are completed and as approaches to waste management and education evolve.

RESOURCES

The City will need to invest in sufficient resources to implement the WRMP and its Action Plan.

REFERENCES

Local Government Act (1995), Government of Western Australia.

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United Nations Environment Programme (2010), Waste and Climate Change: Global Trends and Strategy Framework, United Nations Environmental Programme Division of Technology, Industry and Economics International Environmental Technology Centre Osaka/Shiga.

Waste Avoidance and Resource Recovery Act (2007), Government of Western Australia.

Western Australian Waste Authority (2019), 2030 Western Australia's Waste Strategy, Government of Western Australia.

Civic Centre 9474 0777

Fax 9474 2425 www.southperth.wa.gov.au

Recycling Centre 9367 2492

Animal Care Facility 9474 0777

♥ 199 Thelma St, Como

George Burnett Leisure Centre 9474 0855

South Perth Library 9474 0800

Manning Library 9474 0822

Old Mill

9367 5788

♥ Melville Pl, South Perth

South Perth Senior Citizens 9367 9880

Manning Senior Citizens

9450 6273

Graffiti Hotline 1800 007 774

Collier Park Golf Course

9484 1666

♥ Hayman Rd, Como

Collier Park Village

9313 0200

9 16 Morrison St, Como















