

Recycled Water Management Policy



Record number	D22/24815
Responsible Manager	Group Coordinator – Water, Waste and Environment
Other key internal stakeholders	Director Assets & Environment Water Resources Specialist
Last reviewed	23 August 2022
Adoption reference	Council
Resolution number	1306
Previous review dates	16/10/19 (Formerly Recycled Water Policy), 8/11/16, 17/07/13, 09/03/10
Legal requirement	N/A
Due date next review	2025

The electronic version of this document is the controlled version. Printed copies are considered uncontrolled. Before using a printed copy, verify that it is the current version.

1 PURPOSE

The purpose of this Policy is to outline Council's commitment to:

1. The use of recycled water as a sustainable alternative source of water for the purpose of irrigation and activities identified in the Scope of this Policy.
2. The use of stormwater harvesting as a sustainable approach to stormwater management, reducing the demand on Council's stormwater infrastructure.
3. The use of recycled water to improve the resilience of the City to climate change impacts, reducing reliance on mains water, maintaining and improving biodiversity and environmental health and maintaining green infrastructure.
4. Effective management of recycled water infrastructure that is aligned with best practice guidelines, codes, standards and legislation.
5. Responsible water resource management that takes into consideration social and environmental outcomes that bring about sustained long-term value for our community in a rapidly changing environment, managing risk and seeking opportunities in response to changes.

2 Scope

Recycled water is used for the following activities:

1. Irrigation of sporting fields, reserves parks and gardens
2. Dust suppression
3. Street sweeping
4. Street tree watering
5. Hydro-jet operations
6. Preparation of chemicals
7. Service Centre vehicle wash bay

3 POLICY

Council acknowledges that water is a climate sensitive valuable resource that should not be wasted. Council promotes and supports the safe and responsible use of recycled water to reduce the pressures on limited drinking water resources for the purpose of maintaining public amenity and making the City a vibrant and liveable place for its community.

Council's recycled water will be used for irrigation of Council's assets, supply to external users (subject to available supply), stand pipe supply for alternative use for water cartage and other purposes in accordance with all relevant legislative obligations. Council is committed to providing a healthy, safe and reliable recycled water supply which is fit for its intended usage.

The implementation of recycled water schemes are important for the following reasons, which align with Council Strategic Plan:

1. Reducing pressure on climate dependent water resources.
2. An effective climate mitigation measure by integrating stormwater management while meeting current and future water demand for maintaining or improving green infrastructure, biodiversity and environmental health.
3. Reducing the adverse impact of urban heat island impacts by creating more comfortable ambient temperature in and around irrigated reserves, creeks and wetlands.

4. Promotes environmental sustainability by:
 - i. Retaining water in the City enhancing biodiversity in wetlands, creeks and waterways.
 - ii. Reducing reliance on mains water and the River Murray.
 - iii. Increasing the available water required for environmental flows, improve riparian health and reduce the risk of erosion and sediment transport.
 - iv. Reducing mains water demand and associated costs.
 - v. Recharging underground aquifers with treated water providing environmental benefit.
 - vi. Flood mitigation and improvement in water quality with pre-treatment that takes place in wetlands.
 - vii. Protection of the environment through the reduction of effluent discharge into the ocean.

Council will achieve this by committing to the following principles:

1. Apply a risk-based management approach that is consistent with the Australian Guidelines of Water Recycling (AGWR).
2. Apply best practice in asset management, operation, maintenance, design and planning of recycled water infrastructure.
3. Ensure that protection of public health and the environment is recognised as being of paramount importance.
4. Applying the principles of ESCOSA in the management of the recycled water scheme.
5. Applying the principles of the Office of Technical Regulator in the operation, maintenance and planning of the recycle water scheme.
6. Application of 'Catchment to Tap' management philosophy to manage water quality throughout the water cycle.
7. Ensure that there is efficient use of recycled water.
8. Plan the recycled water scheme to be able to meet current and future demands (as determined by Council) through effective stakeholder consultation and undertaking long term integrated water cycle management planning and infrastructure planning.
9. To apply an integrated water management approach that considers economic, environmental, social and wellbeing benefits that meet the current and future needs of the community.
10. Where feasible, continue to expand the recycled water network to reduce reliance on mains water.
11. Actively advocate for State and Federal government entities to support water recycling related projects that align with Council's strategies and plans.
12. Actively seek grant funding to support the sustainable growth of the recycled water scheme.
13. To promote stakeholder confidence in Council's recycled water scheme through safe, reliable and well maintained systems.
14. Implementation of a sound business continuity plan to minimise the risk of disruption to services.

3.1 Council's Commitment to Continuous Improvement and Advocacy

Council will:

1. Participate in and support appropriate studies, investigations, research and development activities that will drive continuous improvement on matters related to recycled water, water sensitive urban design and environmental management.
2. Contribute to the development of industry regulations and guidelines, and other standards relevant to public health and the water cycle.
3. Continually improve Council practices by assessing performance against statutory requirements, technical guidelines and standards, corporate commitments and stakeholder expectations.
4. Ensure that employees are provided with adequate training to operate and manage the recycle water scheme and associated infrastructure.
5. Engage appropriate industrial, technical and scientific expertise in developing recycled water schemes.

3.2 Council's Commitment to Effective Stakeholder Engagement

Council will:

1. Maintain communication and partnerships with all relevant agencies involved in management of our water resources.
2. Recognise the importance of community participation in decision making processes and the need to ensure that community expectations are given proper consideration
3. Integrate the needs and expectations of recycled water stakeholders into council planning processes.

3.3 Future Recycled Water Connections

A large proportion of Council's recycled water is supplied to Council owned facilities, which include sporting fields and major reserves (such as the Civic Park and Golden Fields reserve). A small proportion of recycled water is supplied to private customers for irrigation, which include schools.

In regard to the management of current and future recycled water connections:

1. Council will cease to offer new connections to any other entity until such time Council is able to provide recycled water services that are price competitive with SA Water mains water pricing.
2. Council will continue to supply recycled water to current customers connected to Council's recycled water scheme.
3. Council will consider connecting new customers to the scheme if all the following conditions are met:
 - a. Adequacy of recycled water supply to meet Council's water demand;
 - b. New connections shall provide a significant improvement in community benefit;

- c. New customers should cover the cost of new connections. However, Council will take into consideration the value of the community benefit and provide financial assistance that will be negotiated between the Council and new customers; and
- d. Feasibility of connecting the new customer to the recycled water scheme.
- e. Council is able to provide recycled water services that are price competitive with SA Water mains water pricing.

4 Employees

All employees involved in the supply of recycled water are responsible for understanding, implementing, maintaining and continuously improving the recycled water management system in line with their role and delegated authority.

Council encourages membership and participation in professional associations dealing with the management and use of recycled water.

Council will ensure that employees are provided with adequate training to operate and manage the recycled water scheme and associated infrastructure.

5 DEFINITIONS

For the purposes of this policy the following definition applies:

Mains water

Water that is sourced from SA Water's drinking water supply.

Managed Aquifer Recharge (MAR)

Intentional recharge of treated water for subsequent use or environmental benefit.

Recycled water

Non-potable water generated from stormwater harvesting or from sewage, treated to a standard that is appropriate for its intended use.

6 LEGISLATIVE FRAMEWORK

It is a legislative requirement for Council to have a Recycled Water Policy to show Council's commitment to responsible use and management of recycled water.

The following legislation applies to this policy:

Environment Protection Act 1993

The Environment Protection Act 1993 provides for the protection of the environment.

South Australian Public Health (Wastewater) Regulations 2013

The Regulations provide for the management and operation of waste control systems.

Council will also implement this policy in accordance with the following:

- a. National Water Quality Management Strategy, Australian Guidelines for Water Recycling: Managing Health and Environmental Risks 2008

- b. Environment Protection (Water Quality) Policy 2003
- c. Safety, Reliability, Maintenance, Technical Management Plan (SRMTMP)

Water Industry Act 2012

An Act to facilitate planning in connection with water demand and supply; to regulate the water industry, including by providing for the establishment of a licensing regime and providing for the regulation of prices, customer service standards, technical standards for water and sewerage infrastructure and installations and plumbing, and by providing performance monitoring of the water industry; to provide for other measures relevant to the use and management of water.

Water Industry Regulations 2012

This regulation supports the Water Industry Act 2012

Essential Services Commission Act 2002

This Act establishes the Essential Services Commission of South Australia (ESCOSA)

6.1 Other references

Council's documents including:

- a. Council's Fees and Charges Register
- b. Safety Reliability Maintenance Technical Management Plan (SRMTMP)
- c. [Recycled Water Risk Management Plan](#)

External Documents Including:

- a. Compliance Systems and Reporting: Water Industry Guideline No.1 (WG1/2) July 2013 (available from: <http://www.escosa.sa.gov.au/water-overview/codes-guidelines/water-guidelines.aspx>)
- b. National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Oct 2000
- c. National Water Quality Management Strategy: Australian Guidelines for Water Recycling: Managing Health and Environmental Risk (Phase1) 2006
- d. National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting, Oct 2000
- e. [National Water Quality Management Strategy: Australian Guidelines for Water Recycling: Managing Health and Environmental Risks \(Phase 2\) Augmentation of Drinking Water Supplies 2008](#) – Under this strategy it is recommended as best practice to have a recycled water policy.
- f. Water retail code – minor and intermediate retailers WRC-MIR/01 July 2013 (available from: <http://www.escosa.sa.gov.au/water-overview/codes-guidelines/water-codes.aspx>)
- g. Non-drinking water guidelines – Guidelines for non-drinking water in South Australia designed for the plumbing, water industries, water industry entities and property owners with a non-drinking water supply.

5. STRATEGIC PLAN/POLICY

5.1 Strategic Plan

The following strategic objectives in Council's Strategic Plan 2025 are the most relevant to this report:

Objective	Comments
Community	
<i>People feel a sense of belonging, inclusion and connection with the City and the community</i>	Recycled water is supplied to Council reserves and sporting fields. This policy ensures that the quality of recycled water is fit for purpose.
<i>People can have a say in decisions that affect them and the key decisions of the Council</i>	The Policy recognises the importance of community participation in decision making processes and the need to ensure that community expectations are considered.
Environment	
<i>Environmentally valuable places and sites that are flourishing and well cared for</i>	Water from managed aquifer recharge can be used for environmental flows, which will provide a fresh flush of water to connect sections of stagnant water in creeks and maintain riparian health through hot and dry months.
<i>A community that is protected from public and environmental health risks</i>	Recycled water provides the following benefits: <ol style="list-style-type: none"> 1. Irrigation of public open space with reducing impacts on the natural environment that rely on environmental flows (eg. River Murray). 2. Provides areas of cool refuge during hot days. 3. Maintain landscaping, tree screens and urban forest.
<i>The carbon footprint of our city is reduced through the collective efforts of community and Council, including businesses</i>	Desalinated water is highly energy intensive. Recycled water reduces reliance on mains water with a more sustainable approach.
<i>Our consumption of natural resources is minimized by reducing, reusing and recycling products and materials, and using renewable resources</i>	Recycled water reduces the reliance on mains water which is predominantly supplied from water taken from the Murray Darling Basin.

Objective	Comments
Community	
<i>We are resilient to climate change and equipped to manage the impact of extreme weather events</i>	Recycled water is an accepted alternative source of water to improve the climate resilience of community. This includes mitigating against urban heat island impacts, management of environmental flows, drought and flood resilience. It is part of an integrated approach to manage climate change risk.
<i>Our tree canopy is increasing</i>	Recycled water is used for irrigating tree screens, landscaping and establishing new trees. This policy ensures that the quality of recycled water is fit for purpose.
Economy	
<i>Modbury Precinct is revitalised as the city's key activity</i>	The recycled water scheme has been extended to include reserves in the Modbury Precinct. This policy supports actively seeking grant funding to expand the recycled water scheme to include more reserves.
<i>People are supported to develop their leadership and employment capabilities</i>	This policy supports the training of staff to ensure that their skills are relevant and up to date.
Places	
<i>Streets, paths, open spaces and parks are appealing, safe and accessible</i>	High quality fit for purpose recycled water is used for the irrigation of open space to provide an appealing and safe place for the community.
<i>Buildings and places are energy efficient, well designed and display a uniqueness of character and identity</i>	This policy supports a system of continuous improvement to ensure that there is efficient electricity usage which is monitored and improved upon when producing recycled water.
Leadership	
<i>Customer service provides a positive experience for people and is based on honesty and transparency</i>	This policy recognises the importance of community participation in decision making processes and the need to ensure that community expectations are considered.

Objective	Comments
Community	
<i>Planning considers current and future community needs</i>	This policy recognises the importance of ensuring the recycled water scheme ability to meet current and future demands through effective stakeholder consultation and undertaking long term integrated water cycle management and infrastructure planning.
<i>Delivery of services is sustainable and adaptable</i>	This policy supports a system of review and performance benchmarking to ensure that service delivery is sustainable.
<i>Decision making is informed, based on evidence and is consistent</i>	This policy supports the adoption of best practice asset management, using evidence base decision making. In addition, this policy recognises the importance of community participation in decision making processes to ensure that community views are considered.
<i>Major strategic decisions are made after considering the views of the community</i>	This policy recognises the importance of community participation in decision making processes .

5.2 Organisation Plan

Our Strategic Plan is supported by an Organisation Plan which focuses on four key themes of customer care, learning & growth, future capability and sustainable operations. The key theme most relevant to this policy is sustainable operations, in ensuring that we make consistent, informed decisions which are evidence based.

6. POLICY IMPLEMENTATION

This Policy will be implemented by the Chief Executive Officer or relevant portfolio director and managed in accordance with Council's scheme of delegations.