



DRAFT Integrated Water Management Plan

2026-31

Table of Contents

Kaurua Acknowledgment	3	Action Plan	13
Mayor’s Message	3	Focus Area 1. Water Sensitive City.....	14
Our Plan at a Glance	4	Focus Area 2. Diverse Fit-for-Purpose Water	16
Introducing the Integrated Water Management Plan....	5	Focus Area 3. Water-Smart Landscapes	18
Water and Our City	8	Appendix 1: Glossary of Technical Terms and Acronyms.....	20
Working towards a Water Sensitive City.....	9	Appendix 2: Approaches to Water Management Over Time.....	22
Water in a Changing Climate	11		

Cover image: Local residents caring for nature at Birkenhead Naval Reserve, Birkenhead



Mayor's Message

To be added following consultation.

Claire Boan
Mayor, City of PAE



Kaurna Acknowledgment

We would like to acknowledge and pay respect to the Traditional Owners of the land on which we stand, the Kaurna People of the Adelaide Plains. It is upon their ancestral lands that the Port Adelaide Enfield Council meets. It is also The Place of the Kardi, the Emu, whose story travels from the coast inland. We pay respect to Elders past and present. We respect their spiritual beliefs and connections to land which are of continuing importance to the living Kaurna people of today. We further acknowledge the contributions and important role that Aboriginal people continue to play within our shared community.

*Artist credit: NHARLA, Colleen Raven, 2024.
Ngapartji Ngapartji roughly translates to 'I give, you give'.*

Our Plan at a Glance

Clean and Green City – a city that values its natural environment

As our climate becomes hotter and drier and our population grows, water will only become more important. Integrated water management means planning and managing all parts of the water cycle together, including drinking water, stormwater, wastewater, groundwater and recycled water.

This plan outlines how we will reduce our use of mains water from operations, use diverse fit-for-purpose water supplies, create water-smart landscapes and transition the council towards a water sensitive city.

Water
Security and
Reuse

Flood Resilience

Healthy
Waterways
and Coasts

Healthy
Landscapes

Community
Value

Economic
Prosperity

Supporting
conditions

Water Sensitive City

Diverse Fit-for-Purpose Water

Water-Smart Landscapes

Fragmented water governance and inconsistent decision making increase the risk of inefficient service delivery, duplicated investment and poorer long-term environmental and financial outcomes.

- Grow water literacy and leadership
- Embed integrated water management (IWM) across council systems
- Strengthen water project delivery
- Create water sensitive policies and processes

- By 2031, 80% of relevant staff will achieve a 'pass' rating or better in the integrated water management literacy training module
- Embed IWM across relevant policies, strategies and operations by 2031

IWM is embedded across the council's governance, planning, risk and reporting systems, supported by a skilled workforce with the capability to deliver this as business as usual. This ensures clear accountability, transparent performance reporting and sustained delivery across the life of the plan.

Over-reliance on potable water exposes the council to rising costs and water restrictions, increasing financial and operational risk under a changing climate.

- Improve existing alternative water supplies
- Extend existing alternative water supply networks
- Identify new alternative water supply options
- Improve water efficiency

- Increase the percentage of alternative water that makes up the council's water balance from the current baseline of ~20%

We increase our use of alternative water sources, reducing reliance on drinking water and strengthening water security across all operations.

Traditional landscape, drainage and stormwater management approaches increase exposure to climate-related risks, including flooding. Additionally, extreme heat can lead to asset degradation, putting community safety, environmental health and council infrastructure at risk.

- Create cooler, greener streets and public spaces
- Deliver water sensitive urban design (WSUD)
- Create healthy wetlands
- Naturalise water channels

- Develop a realistic framework or method for collecting water quality and pollutant data from our wetlands and waterways
- Set a credible water quality target by 2031

We have a reliable method for collecting water quality and pollutant data, enabling us to set credible water quality targets and track improvements in our wetlands, waterways and Gulf St Vincent.

Introducing the Integrated Water Management Plan

The **Integrated Water Management Plan (IWMP) 2026–31** explains how we will care for water across the City of PAE as the climate changes and the community grows. It supports the **City Vision 2024–34** and guides everyday decisions about our streets, parks, wetlands and stormwater system.

The plan outlines practical steps to keep our neighbourhoods green, reduce flooding and protect our waterways and coastline by using the right water for the right purpose. It also brings together existing council plans such as Stormwater Management Plans, Asset Management Plans and Wetland Management Plans, so that projects are co-ordinated and deliver better value for the community.

The IWMP sits under PAE's **Clean and Green City Strategy** and **Living Environment Plan 2026–31**, replacing the former **Energy and Water Efficiency Management Plan**. It directly responds to the council's corporate strategic risk relating to environmental sustainability, and supports related areas such as governance, asset management, community participation and workforce safety.

Urban greening, biodiversity and climate actions are supported through:

- The **Urban Greening and Biodiversity Plan 2026–31**
- The **Climate Response Plan 2026–31**

These plans will be delivered in conjunction with the Integrated Water Management Plan and contain their own actions, targets and measures.

What is Integrated Water Management (IWM)?

IWM means planning for the **whole water cycle** in a connected way, including drinking water, stormwater, wastewater, groundwater and recycled water. Instead of treating each part separately, it looks for solutions that deliver multiple benefits.

For the community, the results are:

- Greener, cooler neighbourhoods
- Healthier waterways and coastlines
- Reduced flood risk
- Reliable and affordable water for public spaces
- Smarter use of public money

Because PAE manages planning, stormwater, streets, parks and community facilities, we play a key role in shaping how water moves through the city.

Water does not stop at council boundaries, so the IWMP aligns with regional initiatives such as AdaptWest and emerging Coastal Hazard Adaptation Plans. Working with neighbouring councils, utilities, industry and state agencies ensures that water outcomes are delivered at the right scale and that they support regional resilience.

Figure 1 shows how IWM requires planning across the water cycle and with multiple partners to deliver benefits to the community and environment.

A water sensitive city is one that manages water in ways that support liveability, resilience and a healthy environment by using water efficiently, protecting and restoring waterways, reducing flood risk and making use of diverse fit-for-purpose water sources.

Purpose of the Plan

This plan outlines how we will:

- Reduce mains water use
- Use a wider range of fit-for-purpose water sources
- Create water smart landscapes
- Transition towards a water sensitive city

The plan focuses on areas where we have direct control or strong influence, ensuring that we lead by example through our assets, services and decision making.

Figure 2 shows how related PAE plans, policies and guidelines, along with relevant regional, State and national plans, support us to deliver the outcomes established in the IWMP.

Introducing the Integrated Water Management Plan

Alignment with State and Regional Directions

The IWMP reflects current South Australian priorities, including:

- Reducing reliance on drinking water
- Integrating planning for green, vegetated areas, such as parks and reserves and blue spaces that contain water, such as wetlands and waterways
- Strengthening water sensitive urban (WSUD) design
- Ensuring that new greening has secure water supplies
- Unlocking climate-independent water sources
- Increasing climate resilience
- Adopting governance models that support IWM

These priorities are embedded throughout the plan, helping us contribute to state-wide goals for liveability, water security and environmental protection.

How the Plan Works

Delivery is supported by:

- A detailed internal implementation plan that outlines timing, resourcing and responsibilities
- Annual monitoring, reporting and reviewing against agreed targets

The plan is designed to evolve as new data, technologies and regulations emerge. Implementation occurs through annual business planning, with progress tracked to ensure accountability and continuous improvement.

A glossary of technical terms and acronyms is provided in Appendix 1.

Figure 1: Our approach to Integrated Water Management

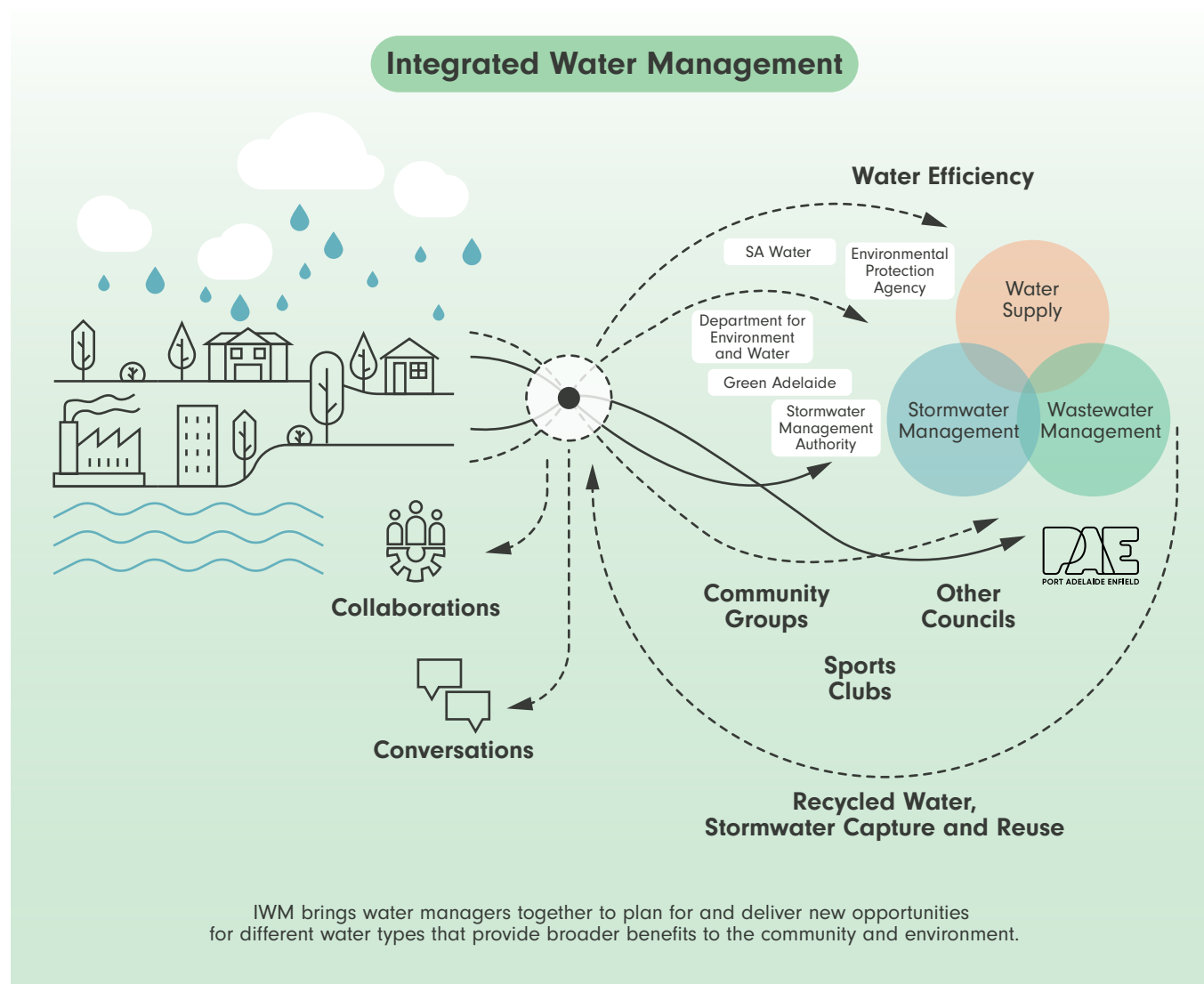
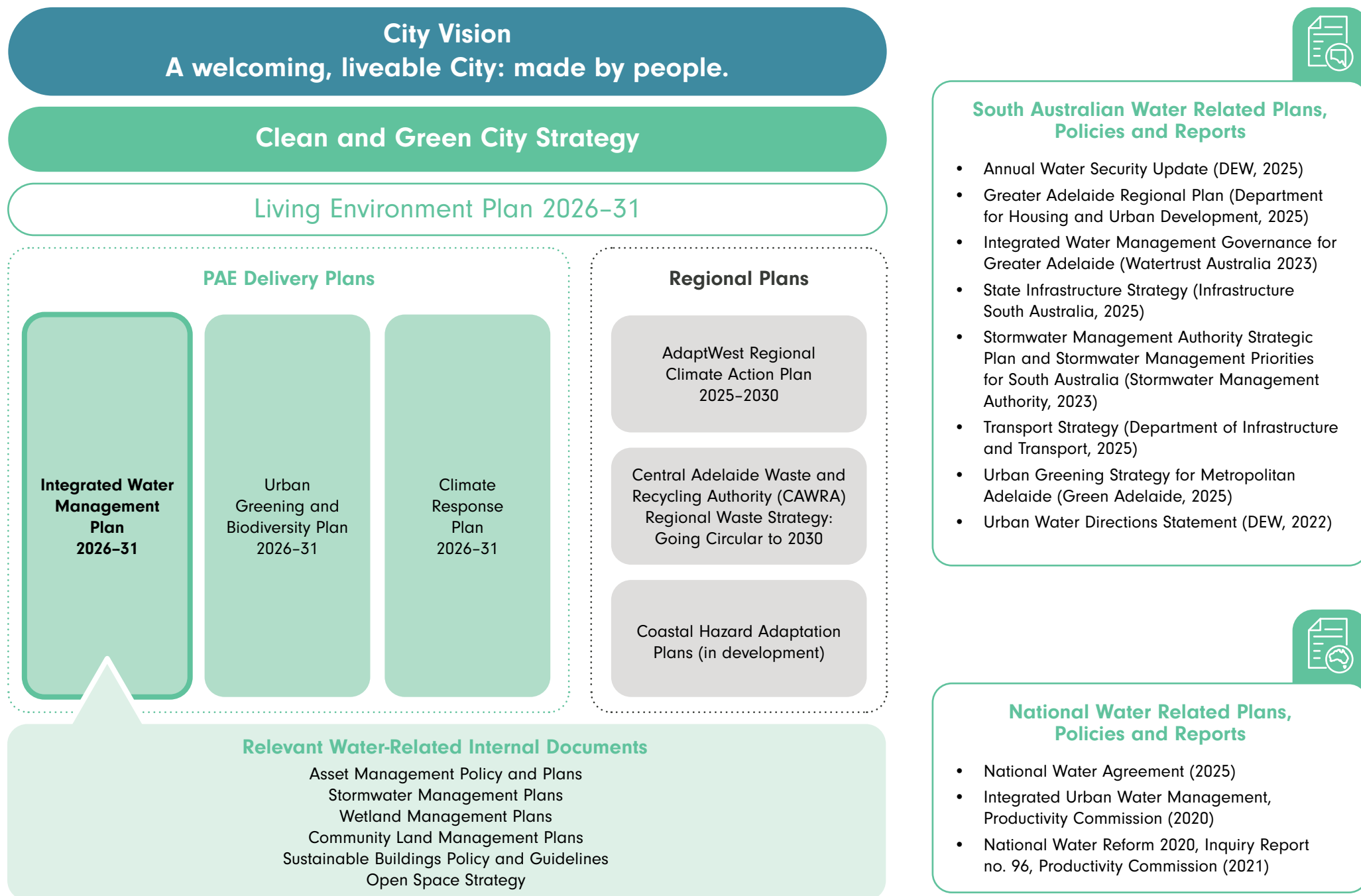


Figure 2: The IWMP is supported by other local, state and federal government plans, policies and guidelines



Water and Our City

The council plays a major role in how water is managed across our city. We look after important assets such as stormwater pipes, wetlands, parks, roads and community facilities, which all depend on water and all influence how much we use, the quality of stormwater and our city's flood risk.

We have been working to reduce our use of drinking (potable) water by increasing alternative water sources. In 2024-25, we used a mix of drinking water and non-potable water from groundwater, stormwater and recycled water schemes run by partners including the City of Charles Sturt, the Eastern Region Alliance and Lightsview ReWater (Figure 3). Most of this water is used to irrigate parks, reserves and sporting fields (Figure 4).

Managing water well also means maintaining the large network of infrastructure that keeps our city safe and healthy, reducing flood risk, protecting water quality and supporting green spaces and the coastline. Much of this infrastructure is ageing and needs ongoing maintenance and upgrades, especially as our climate changes.

Water is essential to making PAE a healthy, liveable and vibrant place. It keeps parks green, trees growing and neighbourhoods cool. It also supports everyday services like drinking water, wastewater and stormwater management.

Local industries, from manufacturing and shipping to tourism, depend on reliable water supplies. Natural environments, including the coast, wetlands and the Port River, also rely on clean and well-managed water to stay healthy.

As at 2025-26, PAE owns and manages on behalf of the community:

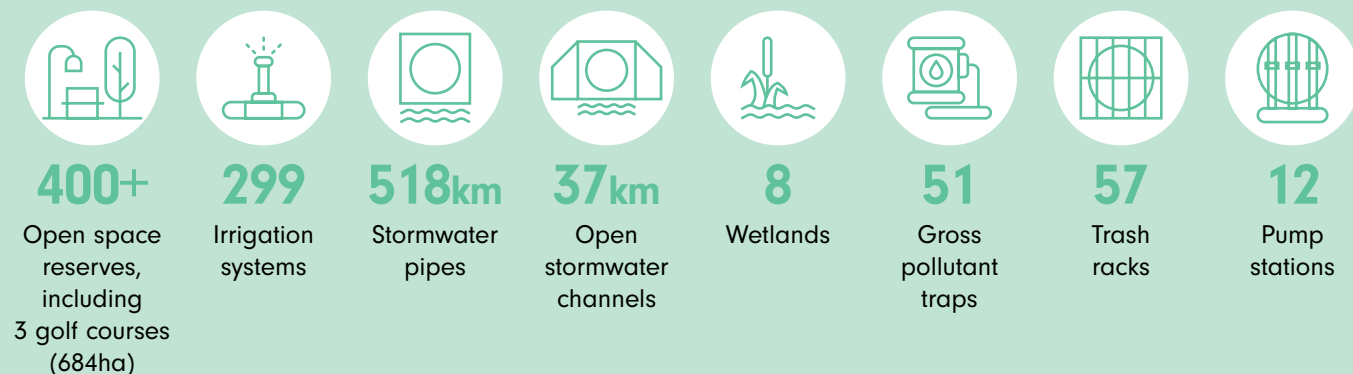


Figure 3: Amount of water used by the council from different sources (2024-25).

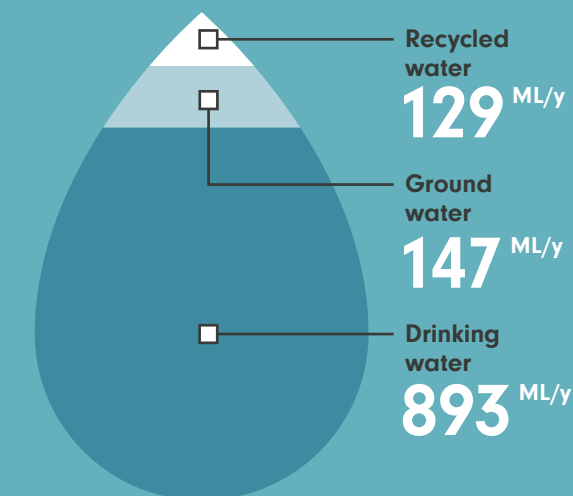
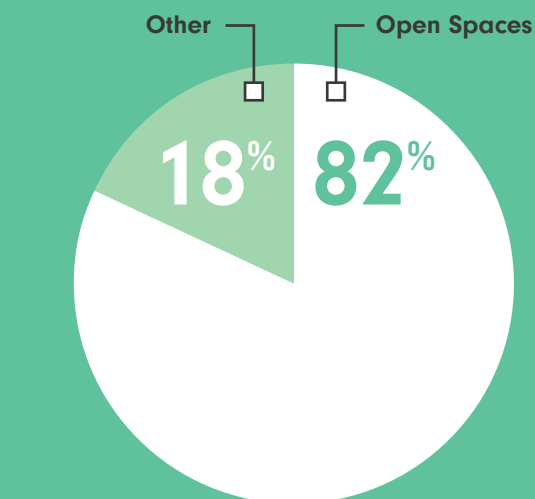


Figure 4: Proportion of water used by the council on open spaces and for other uses such as in council buildings.



Working towards a Water Sensitive City

This plan is shaped by six long-term Integrated Water Management (IWM) outcome areas¹, along with overarching 'Supporting Conditions'. Together, they describe what successful water management looks like for PAE (see Table 1). These outcomes are based on best-practice IWM approaches.

A water sensitive city manages water in ways that support liveability, resilience and a healthy environment. This includes using water efficiently, protecting and restoring waterways, reducing flood risk and making use of a range of fit-for-purpose water sources.

By working to achieve these outcomes, we can see water challenges as opportunities. For example, stormwater can be captured to cool streets and support greener public spaces, and treated water can be reused for non-drinking purposes. Throughout this plan, actions link back to these outcomes to guide priorities and track progress.

Integrated Water Management reframes the urban water challenge as a chance to deliver multiple benefits. Stormwater can recharge groundwater, cool neighbourhoods and irrigate green spaces. Wastewater can be treated and reused for industry or irrigation. When designed intentionally, these systems also support climate resilience, biodiversity, heat mitigation and water literacy.

IWM supports:

- **Place making:** Water can shape the identity of a place through green infrastructure, water features or restored waterways, improving liveability and wellbeing
- **Circularity:** Using alternative water sources like treated stormwater or wastewater reduces waste and supports a sustainable water supply
- **Resilience:** A co-ordinated approach helps reduce flood risk, secure water supplies and protect environmental health in a changing climate
- **Stewardship:** Working together across councils, communities and catchments aligns efforts, attracts funding and delivers shared outcomes

Appendix 2 provides more detail on how water management in PAE has evolved over time.



¹ Adapted from IWM Planning Guidelines (Victorian Government, 2025)

Working towards a Water Sensitive City

Table 1: Integrated Water Management Outcomes for PAE

Integrated Water Management Outcome	 Water Security and Reuse	 Flood Resilience	 Healthy Waterways and Coasts	 Healthy Landscapes	 Community Value	 Economic Prosperity	 Supporting conditions
What This Means	Using the right water for the right purpose, so that we rely less on drinking water	Planning and building smarter to reduce flood risks	Ensuring that cleaner water flows into wetlands, rivers and the sea	Having greener streets, parks and open spaces that can cope with heat and drought	Providing places that people enjoy, value and help care for	Supporting local jobs and investment through water planning	Working together, staying committed and building skills and capacity to deliver IWM
What We Are Working Towards	Securing a mix of water sources so that the community can keep growing and stay resilient in a changing climate	Understanding and managing the impacts of climate change on flooding using data, innovation and community input	Improving water quality to support a swimmable Port River and healthy plants and animals by treating runoff, holding polluters accountable and involving the community	Using recycled water where it is most needed, designing climate-ready open spaces and protecting trees through development requirements and water sensitive design	Embedding First Nations knowledge in planning, helping the community understand our water story and creating more blue-green spaces while reducing hard infrastructure	Ensuring that development contributes to water infrastructure and supports positive environmental outcomes	Creating the supporting conditions for IWM by strengthening collaboration with our community, neighbouring councils, utilities and government, and building the commitment, capacity and capability needed to deliver shared outcomes

Water in a Changing Climate

As our climate becomes hotter and drier and our population grows, water will become more important. These changes bring new challenges. Effective water management will be essential to protecting our environment, supporting local industries and maintaining the quality of life that the community values.

Table 2 summarises key climate challenges affecting PAE, what they mean for the council and the community, and how this plan responds. Each challenge is linked to the relevant Focus Area and the IWM outcomes that the response supports.

Table 2: Responses to Climate Challenges for Water in PAE

Challenge	How Will This Impact PAE?	Response	Integrated Water Management Outcomes for PAE						
			 Water Security and Reuse	 Flood Resilience	 Healthy Waterways and Coasts	 Healthy Landscapes	 Community Value	 Economic Prosperity	 Supporting conditions
 Reduced Rainfall	Projected declines in winter and spring rainfall (up to 20%) will reduce reservoir inflows and increase the likelihood of water restrictions, meaning that parks and high-use open spaces such as sports fields may require more irrigation to remain healthy and fit for purpose	Focus Area 2 (page 16)							
 Increased Risk of Flooding	More intense rainfall events may exceed the capacity of streets and stormwater infrastructure, increasing the frequency of localised flash flooding across the city	Focus Area 3 (page 18)							
 Heatwaves and Urban Heat	More frequent and prolonged heatwaves and temperatures above 40°C will intensify urban heat, particularly in low-canopy, hard-paved areas, increasing risks to health and demand for shaded, irrigated public spaces	Focus Area 3 (page 18)							

Water in a Changing Climate

Challenge	How Will This Impact PAE?	Response	Integrated Water Management Outcomes for PAE						
			 Water Security and Reuse	 Flood Resilience	 Healthy Waterways and Coasts	 Healthy Landscapes	 Community Value	 Economic Prosperity	 Supporting conditions
 More Industry and Housing	Population and industrial growth will increase demand for water and place additional pressure on local stormwater, wastewater and water supply infrastructure, particularly in high-growth precincts	Focus Area 2 (page 16)							
 Rising Sea Levels	Low-lying coastal areas may face increased inundation risk, while saltwater intrusion can raise groundwater salinity and limit opportunities to use groundwater	Focus Area 3 (page 18)							
 Pollution of Waterways and Coasts	Increased runoff from roads and developments will carry pollutants into waterways, wetlands and the coast, degrading water quality and ecological health	Focus Area 3 (page 18)							
 Planning and Policy	Fragmented responsibilities across the water cycle can limit integrated planning and co-ordinated action, reducing our ability to deliver holistic and efficient water outcomes	Focus Area 1 (page 14)							



Action Plan

The Action Plan outlines the practical steps that we will take between 2026 and 2031 to improve our water security, strengthen resilience and transition to a more water sensitive city. Actions are grouped into three outcome areas:

1. Water Sensitive City
2. Diverse Fit-for-Purpose Water
3. Water-Smart Landscapes

Detailed internal implementation schedules, budgets and responsibilities sit outside this public-facing plan.

Water Sensitive City

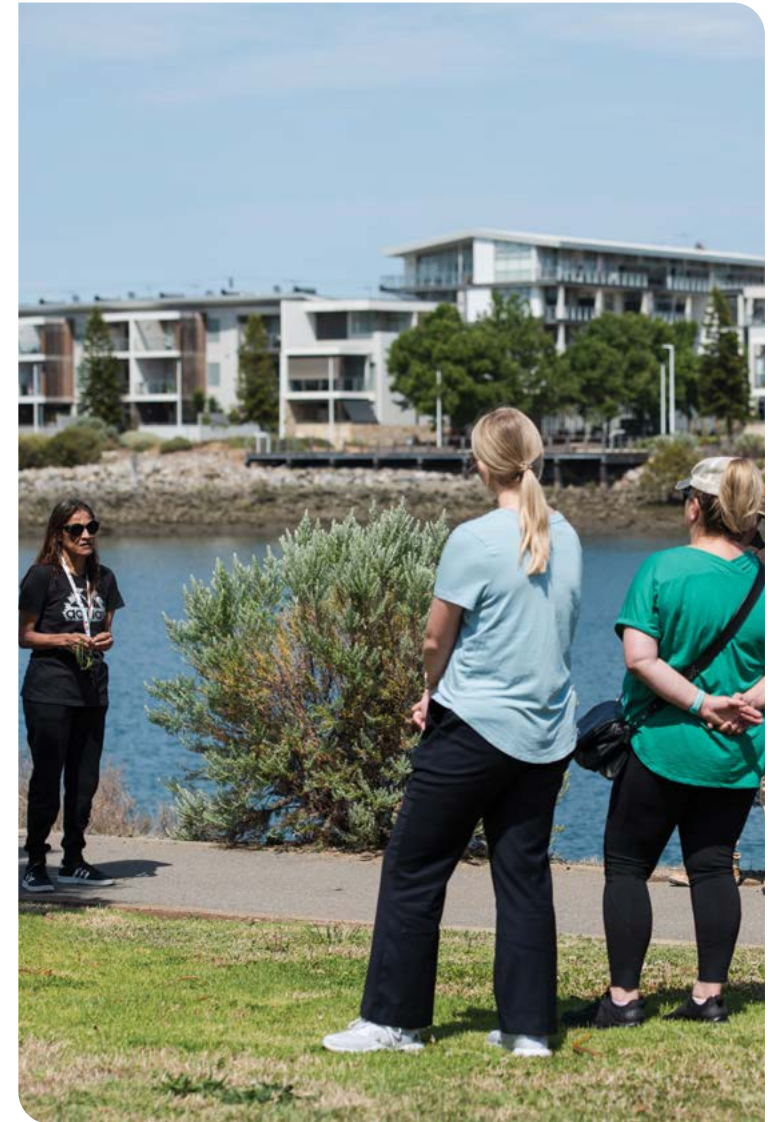


Integrated water management plays a vital role in many of the services the community relies on, from our open spaces and streets to wetlands, drainage systems and community facilities. When council teams work together and make informed decisions, we can better protect our local environment, improve water quality and deliver projects that provide long-lasting value for the community.

When governance is fragmented, processes are inconsistent or capability is limited, there is a higher risk of inefficient service delivery, duplicated investment and missed opportunities for more integrated outcomes. By strengthening co-ordination, building staff capability, improving organisational systems and working closely with neighbouring councils, water utilities, industry and the community, we can reduce these risks and ensure that water-related decisions deliver long-term environmental, social and financial benefits.

To build a water sensitive city, we will continue to:

- Build cross-team collaboration to develop measurable targets in water, biodiversity and greening
- Foster strong regional collaboration with the cities of Charles Sturt and Marion through the cross-council irrigation construction team
- Deliver Asset Management Plans and Stormwater Management Plans that enable IWM outcomes
- Improve how projects account for whole-of-life water outcomes
- Support Citizen Scientists to monitor water quality across local wetlands



Our next steps:

1.1 Grow water literacy and leadership

We will build water knowledge and leadership across the council by providing training, supporting shared learning and ensuring that staff and leaders have the skills and resources they need to manage water effectively.

1.2 Embed IWM across council systems

We will embed IWM into council systems, data and decision making so that water outcomes are consistently considered across planning, projects and operations.

1.3 Strengthen water project delivery

We will improve how we plan, deliver and maintain water projects by using better data, clear technical guidance and stronger whole-of-life investment decisions.

1.4 Create water sensitive policies and processes

We will strengthen policies, advocacy and development processes to support water sensitive design and improve water outcomes in new developments and upgrades.



FOUNDATION INITIATIVE

Water Data Management

Improving how we manage water data will support smarter, more co-ordinated and water sensitive decisions. We already collect useful information across parks, reserves and facilities, but this initiative will turn that data into reliable, accessible insights through better storage, sharing and visualisation.

Consistent dashboards and reporting will help teams spot performance issues, risks and opportunities in real time. Making water data easy to use across all departments will strengthen planning, accountability and integrated project delivery, while building the systems and skills needed for future

water sensitive actions and long-term community benefits.

This work also improves how we collect, store and interpret water-quality data for key waterways and wetlands. Over time, we will gain a clearer picture of baseline conditions and trends, improve data consistency and quality, and make results easier to share. These insights will support evidence-based maintenance, guide pollution reduction efforts and inform future water-quality targets and reporting.

Diverse Fit-for-Purpose Water



The community relies on green parks, irrigated sports fields and shaded public spaces, especially as our climate becomes hotter and drier. These spaces play a critical role in cooling neighbourhoods, supporting wellbeing and sustaining community life, but they depend on reliable and affordable water supplies.

Over-reliance on potable water exposes PAE to rising costs, supply constraints and an increased likelihood of water restrictions, heightening financial and operational risk under a changing climate.

By improving water efficiency and expanding the use of fit-for-purpose water sources such as stormwater, recycled water and groundwater, we can reduce these risks, protect valued community assets and strengthen resilience across public spaces, businesses, sporting clubs and industry.

To ensure diverse fit-for-purpose water, we will continue to:

- Deploy smart metering, smart controllers, rain sensors and weather-responsive systems across priority sites to optimise irrigation, detect leaks and automatically pause watering during rainfall or unsuitable weather conditions
- Maintain and manage existing alternative water supply contracts with utilities such as Lightsview ReWater and Eastern Region Alliance (ERA), as well as with the Department for Environment and Water (DEW) to ensure ongoing access to recycled stormwater and groundwater
- Partner with the City of Charles Sturt to connect their recycled stormwater scheme to Yitpi Yartapuultiku and Alan Iversen Reserve, and trial access to other water sources under the Federal Government Alternative Water Supply Efficiency Measures (AWSEM) program
- Review groundwater licences, allocations and use to identify opportunities to increase available volumes
- Replace older irrigation systems to improve efficiency, performance and reliability
- Integrate tree inlets and WSUD features into streetscape upgrades (e.g. Ansell Street reseal program)



CASE STUDY

Smart Metering

We are using smart meters and weather-responsive irrigation controls to better manage water across parks and gardens. Real-time data allows systems to pause watering during rain, adjust to weather conditions and quickly identify leaks or unusual water use.

This smarter approach reduces water waste, lowers operating costs and supports healthier turf and trees, helping us use water more efficiently while maintaining valued green spaces.

Key benefits include:

- Reduced water waste and earlier detection of leaks
- More efficient irrigation aligned with weather conditions
- Healthier parks, reserves and sporting fields
- Lower operating and maintenance costs

Our next steps:

2.1 Increase existing alternative water supplies

We will increase the use and reliability of existing recycled water, groundwater and aquifer recharge systems to reduce reliance on drinking water.

2.2 Extend existing alternative water supply networks

We will expand non-potable water networks to supply more parks, streets and facilities with alternative water sources.

2.3 Identify new alternative water supply options

We will work with water utilities, neighbouring councils, government and industry to identify and develop new alternative water supplies that support growth and resilience.

2.4 Improve water efficiency

We will use water more efficiently by upgrading irrigation systems, expanding smart controls and improving water performance across council buildings and assets.



FOUNDATION INITIATIVE

Using More Alternative Water Supplies

We're exploring ways to use more bore water to keep our parks and open spaces green, especially at Thomas Turner Reserve and Regency Golf Course. This would help reduce our reliance on mains water and make our irrigation more sustainable.

To do this, we will:

- Apply to increase our groundwater licence so we can use more bore water for irrigation
- Investigate whether a new bore could be installed at Thomas Turner Reserve

- Assess the costs and benefits to understand if the investment will pay off over time
- If the results look positive, develop a detailed design and plan for how the project would be delivered

This staged approach helps us make informed decisions, use water responsibly and support greener community spaces.

Water-Smart Landscapes



Greener, cooler and more attractive streets, parks and natural areas make neighbourhoods safer and more enjoyable for everyone, particularly during periods of extreme heat. The community values shady streets, healthy waterways and spaces that support biodiversity and outdoor activity.

Traditional landscape, drainage and stormwater approaches increase exposure to climate-related risks such as flooding and extreme heat. They can also accelerate asset degradation. By delivering water-smart, multifunctional landscapes through Water Sensitive Urban Design (WSUD), passive irrigation, naturalised waterways and well-managed wetlands, we can reduce risks to community safety, environmental health and council infrastructure, while improving water quality, enhancing biodiversity and creating resilient, climate-ready public spaces.

To deliver water-smart landscapes, we will continue to:

- Apply WSUD techniques in streetscapes to support healthier trees and passive irrigation
- Use passive irrigation in parks and gardens to make better use of rainfall and runoff
- Irrigate key parks and open spaces to maintain cooling and amenity
- Ensure that our stormwater drains are cleaned regularly to remove sediment and debris before it flows to wetlands and receiving waters (e.g. Henschke Street, Dry Creek)
- Operate and maintain coastal wetlands to improve water quality and habitat (e.g. Barker Inlet, Magazine Creek and Range Wetlands)
- Identify WSUD opportunities through stormwater management planning
- Advocate for improved strategic water management in the Gillman area



CASE STUDY

Stormwater System Maintenance (Henschke Street, Dry Creek)

In April 2026, we completed a major clean-out of the Henschke Street stormwater system, removing more than 200 tonnes of sediment and debris to restore capacity ahead of the wetter months. This work improves the safe movement of stormwater from Dry Creek, reduces local flood risk and helps protect nearby wetlands from pollution.

We manage an extensive network of pipes, channels, basins and inlets. Proactive maintenance like this is essential to keeping neighbourhoods safe during heavy rain and supporting healthy waterways.

Key benefits include:

- Reducing local flood risk and improved system performance
- Protecting wetlands and receiving waters from sediment and pollutants
- Providing more resilient stormwater infrastructure under intense rainfall

Our next steps:

3.1 Create cooler, greener streets and public spaces

We will invest in greener streets and public spaces by capturing stormwater, increasing shade and cooling, and supporting community-led greening projects.

3.2 Deliver water sensitive urban design (WSUD)

We will embed WSUD into streets, parks and developments to reduce runoff, support healthy vegetation and improve local environments.

3.3 Create healthy wetlands

We will protect and improve wetlands by strengthening management, addressing catchment impacts and using monitoring data to guide ongoing improvements.

3.4 Naturalise water channels

We will identify opportunities to progressively transform concrete drains and daylight stormwater channels into more natural waterways that improve water quality, increase infiltration, support local biodiversity and enhance local places while maintaining safety and reflecting future stormwater management needs.



FOUNDATION INITIATIVE

Integrated Streetscapes Project

The Integrated Streetscapes Project will establish a clear, city-wide approach to creating cooler, greener and more resilient streets across PAE. By targeting areas with high heat, low canopy and drainage challenges, it will guide future upgrades to deliver lasting community benefits.

The project brings greening, smart water management and place design together, embedding WSUD into the fabric of our streets to support healthy trees, improve cooling and

enhance neighbourhood character. By setting consistent design direction and practical guidance, this initiative lays the groundwork for co-ordinated, value-for-money investment. It also ensures that every streetscape renewal contributes to a more climate-ready city aligned with the City Vision 2024–34.

Appendix 1: Glossary of Technical Terms and Acronyms



This glossary provides simple explanations of key terms and acronyms used in this plan.

Term	Definition
AdaptWest	A regional partnership between the councils of Port Adelaide Enfield, Charles Sturt and West Torrens that works together to prepare for climate change in western Adelaide
Alternative Water Supply Efficiency Measures (AWSEM) Program	A Federal Government program that helps fund projects to save water and expand non-drinking water supplies
Asset Management Plan (AMP)/ Asset Management Plans (AMPs)	A council plan, or group of plans, that explains how assets such as roads, pipes, wetlands and parks will be looked after, renewed and funded over time
Aquifer Recharge	Putting water into an underground aquifer so it can be stored and used later
Biodiversity Sensitive Urban Design (BSUD)	An approach to planning and design that helps protect and improve plants, animals and habitats in urban areas
Blue-Green	Water systems ("blue") and plants ("green") that are within or connected to urban environments
Coastal Hazard Adaptation Plan (CHAP)	A plan that looks at coastal risks, such as sea level rise, erosion and flooding, and sets out how those risks will be managed over time
Climate Response Plan (CRP)	Our plan for reducing emissions and preparing for the impacts of climate change.
Citizen Scientists	Community members who help collect or observe information, such as water quality data, to support local projects and decision making
CRC Water Sensitive Cities Transition Framework	A framework from the Cooperative Research Centre for Water Sensitive Cities that shows how a city can move toward better, more connected water management over time
Department for Environment and Water (DEW)	The South Australian Government department responsible for water, the environment and natural resources
Eastern Region Alliance (ERA)	An organisation that helps provide non-drinking water supply schemes used by the council
Fit-for-Purpose Water	Water that is suitable for a specific use, such as for drinking or watering parks or in industry, without using higher-quality water than needed
Gross Pollutant Trap (GPT)	A device in the stormwater system that catches litter, leaves and other larger debris before they enter waterways
Groundwater	Water stored underground in soil or rock that can sometimes be pumped out for use

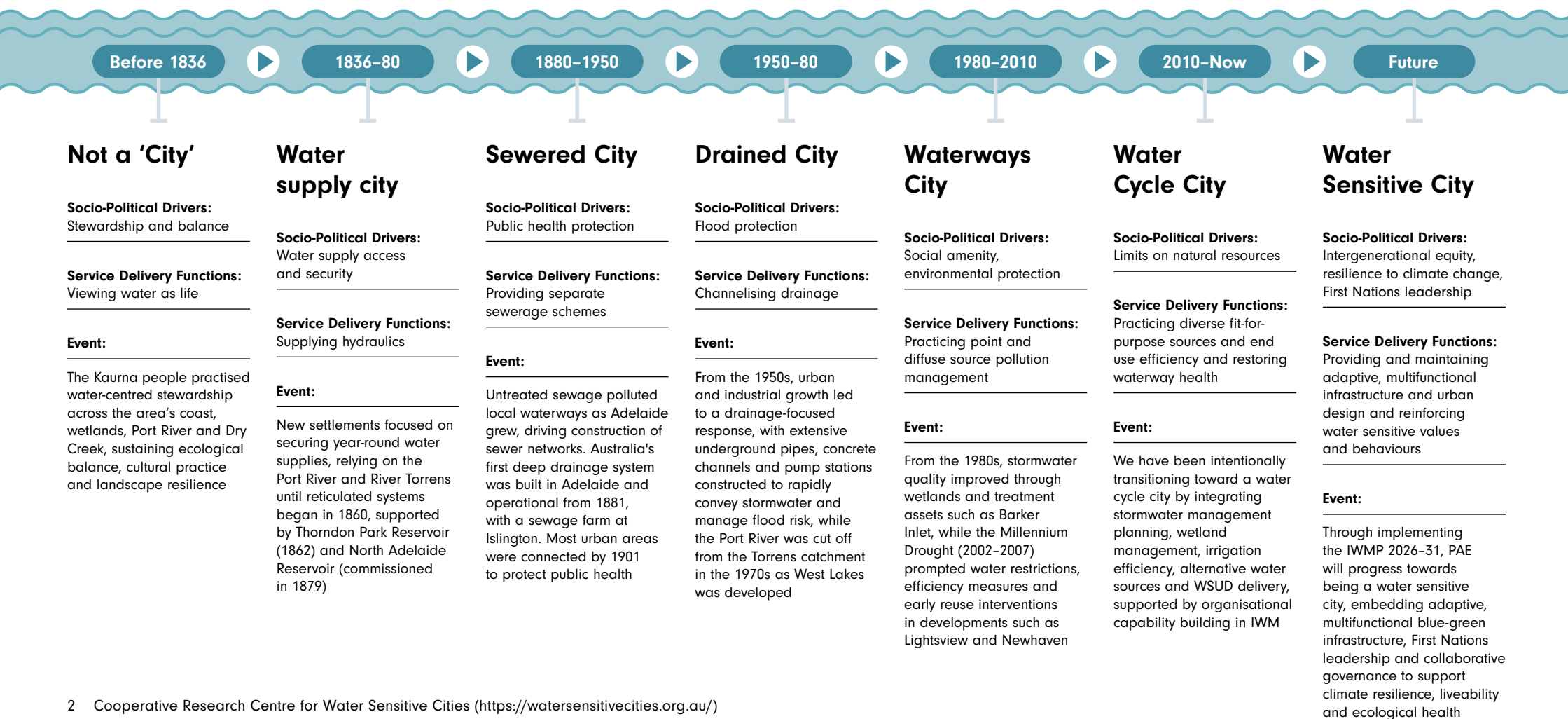
Term	Definition
Integrated Water Management (IWM)	A way of planning and managing all parts of the water cycle together, such as drinking water, stormwater, wastewater, recycled water and groundwater, so they work better as a whole
Integrated Water Management Plan (IWMP)	This plan sets out how PAE will manage water in a more connected and sustainable way from 2026 to 2031
Nature-Based Solutions	Ways of using nature, or working with natural processes, to deal with challenges like heat, flooding and water quality while also creating benefits such as habitat, shade and better public spaces
Naturalised/Naturalisation	Changing a drain or channel so it works and looks more like a natural waterway
Non-Potable Water	Water that is not suitable for drinking but can still be used for other purposes, such as for watering parks or for some industrial uses
Passive Irrigation	Using rainfall or stormwater runoff to water trees and plants, instead of relying only on sprinklers or pumped irrigation
Potable Water	Water that is safe to drink, mains water
Recycled Water	Water that has been treated so that it can be used again for a specific purpose, such as watering parks or supporting industry, instead of using drinking water
Reseal Program	A program of road resurfacing works that keeps roads safe and extends their life
Stormwater	Rainwater that runs off roofs, roads and other hard surfaces into drains, pipes, channels, wetlands or waterways
Stormwater Management Plan (SMP)	A strategic plan that looks at flooding, water quality and stormwater infrastructure in an area and recommends projects to improve how stormwater is managed
Smart Metering	Using digital water meters and data to track water use almost in real time, so leaks and unusual use can be spotted early
Tree Inlet/Tree Pit	A built feature that directs stormwater into the soil around a tree to help it grow and improve the water-soaking capacity of the ground
Urban Greening and Biodiversity Plan (UGBP)	A related council plan that sets out actions to increase urban greening and biodiversity
Water Balance	A summary of where water comes from, how it is used, how much is stored and where it goes across the council's operations
Water Literacy	Understanding how water systems work and knowing enough to make good decisions about water at home, at work and in the community
Whole-of-Life Investment Decisions	Decisions that consider the full cost and benefits of something over its entire life, including planning, building, operating, maintaining and replacing it
Water Sensitive City	A city that uses and manages water in ways that help keep people healthy, support the environment, reduce flood risk and create greener, cooler places
Water Sensitive SA	A South Australian program that supports water sensitive practice, including training and guidance
Water Sensitive Urban Design (WSUD)	An approach to planning, designing and building places that manage water more naturally and make better use of stormwater, groundwater and other water sources
Water Utilities	Organisations that provide water-related services, such as drinking water, wastewater, recycled water or stormwater services
Wastewater	Water that has already been used in homes, businesses or industry and is collected for treatment

Appendix 2: Approaches to Water Management Over Time

Approaches to water management within PAE have evolved over time in response to changing community needs, environmental conditions and governance priorities.

The timeline below reflects this journey using the **Cooperative Research Centre for Water Sensitive Cities Transition Framework**,² highlighting how past decisions shape current conditions and how today's actions lay the foundation for future resilience. PAE is currently operating across multiple stages of the transition framework, with legacy drainage infrastructure co-existing alongside emerging integrated and water sensitive practices.

The concept of a 'water sensitive city' seeks to change the future focus to actively creating a more resilient and liveable PAE through integrated water management. This table pairs the council's water journey with stages of the Cooperative Research Centre for Water Sensitive City's Transition Framework.



² Cooperative Research Centre for Water Sensitive Cities (<https://watersensitivecities.org.au/>)

