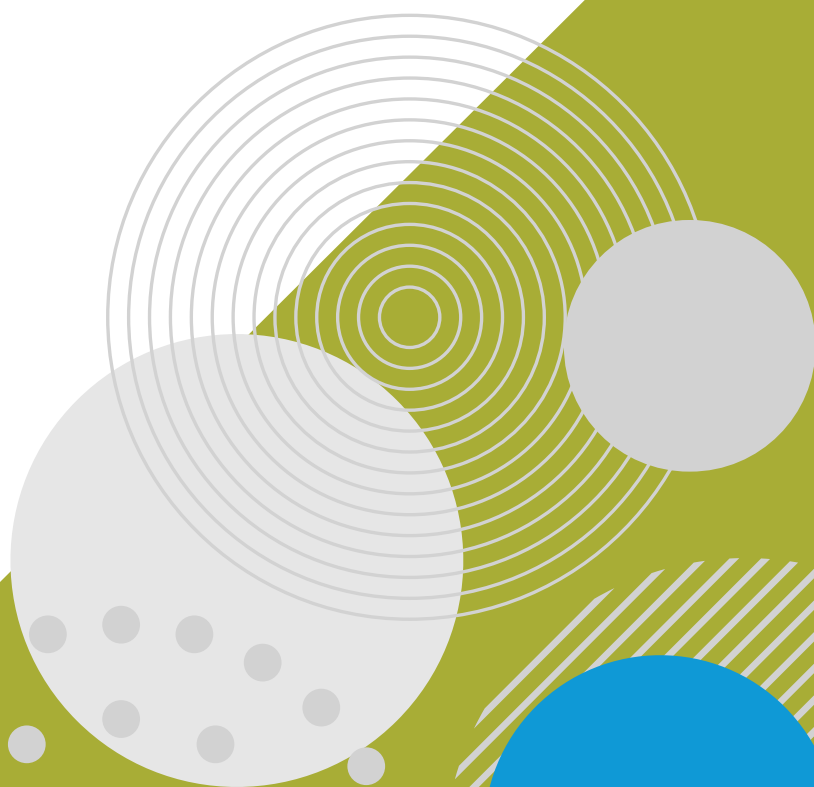




Business Plan

2024 – 2027



Liveable

Resilient

Productive

Sustainable



Authors

This document was prepared by:

Name, title	Belinda Dohring, Program Manager
Organisation	Water Sensitive SA
Address	PO Box 351, Uraidla
Telephone	0431 828 980
Email	belinda@watersensitivesa.com

Version history

Date	Document version	Document revision history	Document author/reviser
27 May 2024	V1.0	Draft for Steering Committee review	B. Dohring
24 August 2024	V2.0	Final for Steering Committee adoption	Water Sensitive SA Steering Committee
26 August 2024	V3.0	Adopted - #37 Steering Committee meeting	B. Dohring

Acknowledgement of country

Water Sensitive SA acknowledges Aboriginal people as the First Peoples and Nations of the lands and waters we live and work upon, and we pay our respects to their Elders past, present and emerging. We acknowledge and respect the deep spiritual connection and the relationship that Aboriginal and Torres Strait Islander people have to Country.

Recognition of collaboration

Water Sensitive SA recognises the organisations, agencies and governments who initiated the program in 2014 including the (former) Adelaide and Mount Lofty Ranges Natural Resources Management Board, SA Water, Stormwater SA, (former) SA Murray-Darling Basin Natural Resources Management Board, SA Environment Protection Authority, Institute of Public Works Engineering Australasia (IPWEA), Local Government Association of South Australia, (former) SA Department of Environment, Water and Natural Resources and local SA metropolitan councils.

We also value the collaboration of the Cities of Charles Sturt, Burnside, Salisbury, Port Adelaide Enfield, Playford and Marion and the (former) Adelaide and Mount Lofty Ranges Natural Resources Management Board, SA Water, Stormwater SA, who officially launched the Water Sensitive SA Program together in 2015.



Contents

1. Who we are	4
2. Our vision	6
2.1. Our framework	8
3. Priorities for 2024-25 to 2026-27	9
3.1. Delivering on our objectives	10
4. Capacity building activities	12
4.1. Activities & audiences	13
5. Program management.....	15
6. Investment & expenditure.....	16
6.1. Investment.....	16
6.2. Expenditure	17
7. Evaluation framework.....	18

Tables

Table 6.1. Estimated program expenditure	17
--	----

Figures

Figure 4.1 Program investment partners 2023-24	14
Figure 5.1 Water Sensitive SA Governance structure	15



1. Who we are

Water Sensitive SA is a capacity building program that provides stakeholders across all disciplines within the local government, development and urban water management industries, with the support they need to achieve the best water sensitive urban design (WSUD) outcomes.

Every capital works project, asset renewal and new development represents an opportunity for smarter water management that contributes to the creation of a more liveable, water sensitive community.

Developers, planners, urban designers, asset managers, engineers, landscape architects, scientists, builders and maintenance workers all have roles in the creation of more liveable cities and suburbs, and many of them recognise the value of WSUD and incorporate it in new infrastructure projects and developments.

Water Sensitive SA provides these professions with access to the latest WSUD information; an opportunity to gain valuable insight from the experiences of other practitioners; and guidelines, tools and training to inspire and facilitate the delivery of best practice WSUD.

What we do

As the central hub for WSUD activity and learning in South Australia, we offer a range of industry-wide services and resources to develop practitioner skills, apply local and national research, support communities of practice, and establish cooperation across

jurisdictions to integrate WSUD into decision making, investment choices and project delivery.

South Australian WSUD practitioners have access to technical tools, networking opportunities and specialist training to address key knowledge gaps and skills. We excel in creating a peer-to-peer learning environment where innovation in water sustainability thrives, and professionals gather to share experiences in a trusted and highly regarded circle of committed practitioners.

We collaborate with our partners to develop resources and tools to support the effective application of WSUD principles and practices. Inhouse training opportunities for our partners enable a shared understanding of both technical and system improvements to support greater WSUD adoption.

We value the diversity of our stakeholders and work with government, local councils, the development industry, business, research institutions and the wider community.

Together, we undertake coordinated activities to facilitate a cultural shift in WSUD adoption within state/regional level planning strategies and policies, to achieve best practice sustainable water outcomes in residential communities, commercial developments and state infrastructure projects.

We translate quality research outputs to create new ideas, products and services to deliver more liveable neighbourhoods, healthier waterways and greener, cooler streets.

Water sensitive urban design (WSUD) is an approach to the planning and design of urban environments, centred on integrating the urban water cycle with the built and natural urban landscape.

It is connected to ecologically sustainable development, with a focus on sustainable management of urban water resources (including potable water, wastewater and stormwater) and environmental protection, and the enhancement of socio-cultural conditions.

Principles of water sensitive urban design:

- Re-integrate water back into urban landscape for cooler urban microclimates.
- Re-use of water where it falls, as close to its source as possible.
- Protect the receiving water quality of streams, rivers and oceans.
- Fit-for-purpose water use



Our story

Water Sensitive SA, launched in 2015 through a collaboration between the then Adelaide and Mount Lofty Ranges Natural Resources Management Board, the cities of Port Adelaide Enfield, Charles Sturt, Playford, Burnside, Marion and Salisbury, SA Water and Stormwater SA, has made substantial strides over the past decade to mainstream water sensitive urban design practice. Here are some of our key accomplishments:

InSite Water integrated stormwater assessment tool and associated guidelines for small-scale infill: Enables performance of lot-scale WSUD solutions to be assessed against stormwater runoff volume, quantity and quality, and water efficiency.

MUSIC Guidelines for SA and MUSIC Auditor tool: These guidelines provide modelling guidance to the consulting industry on input parameters for the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) models, and the Auditor tool enables self-assessment of MUSIC files against the guidelines.

Inspection and maintenance guidelines WSUD assets: These guidelines outline standards and procedures for assessing the condition of WSUD assets, routine maintenance requirements and rectification solutions to common challenges.

Training and community of practice: We bring together leaders in WSUD design and maintenance to build the capacity of SA practitioners to deliver effective nature-based solutions that achieve water quality improvement and more sustainable urban stormwater management.

Website: The establishment of a dedicated website has served as a central hub for information, resources, and updates on WSUD practices and policies in South Australia.

Urban Water Leaders Program: This program empowers WSUD leaders, equipping participants with the knowledge and skills needed to be effective champions for change in WSUD policy and practice.

Our achievements collectively reflect Water Sensitive SA's commitment to mainstreaming sustainable water management practices in urban environments throughout South Australia.

Our achievements – November 2014 to 30 June 2024





2. Our vision

Water sensitive communities that support cooler, greener, wilder and more climate resilient places to live and work.

Our objectives

Water Sensitive SA continues to support Adelaide and our regions on their journey to become water sensitive communities that are sustainable and resilient to a changing climate. We contribute to the creation of greener, cooler and more liveable cities with a focus on improved biodiversity and reduced impacts on the natural environment.

Our mission

Work together with government, industry and community to mainstream water sensitive urban design (WSUD) and integrated water management (IWM) practices that enhance wellbeing and ecological health

Our strategic shifts

Water Sensitive SA's program will contribute to the following strategic shifts:

LIVEABLE:

Communities connect with and value the role of water sensitive urban design and alternative water supplies in supporting healthy landscapes and living systems.

SUSTAINABLE:

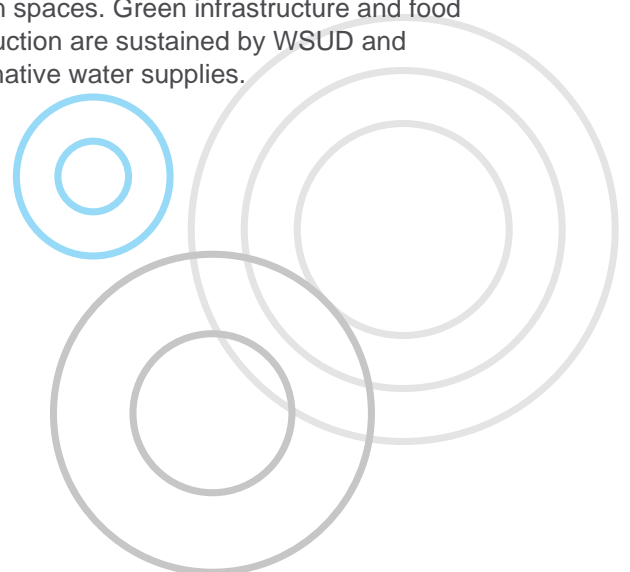
Urban watercourses, coastal areas and marine environments exhibit high aquatic and biodiversity values.

RESILIENT:

Urban landscape climate resilience is enhanced through the application of water sensitive urban design and integrated water management.

PRODUCTIVE:

Communities and businesses thrive in green urban spaces. Green infrastructure and food production are sustained by WSUD and alternative water supplies.





Goals

GREY TO GREEN WSUD is integrated into asset renewal, capital works projects, urban development, and retrofit of existing homes and gardens.

Changes that we expect to see in the urban landscape:

- **Increased capacity to harvest and use rainwater and stormwater** on site, or close to where it falls.
- **Increased, and more biodiverse, soft landscaping and tree canopy** on private and public land, sustained by WSUD (e.g. green walls/roofs, raingardens, wetlands and infiltration systems).
- **Increased pervious pavements** across public and private land to manage stormwater runoff and reintegrate water back into the urban landscape.
- **Higher amenity landscapes and a climate-resilient urban forest** sustained by WSUD and alternate water use.

Water Sensitive SA's role to deliver grey to green is to create an informed and skilled community of practice where relevant government and industry sectors and the community have the knowledge, commitment and skills to deliver cooler, greener, wilder water sensitive communities.

The Water Sensitive SA's program aims to contribute to Green Adelaide's Business Plan, Local Government climate adaptation and asset management plans, and State Government planning policy.

Objectives

The achievement of the following objectives will demonstrate that the program has been effective in its engagement of a broad range of stakeholders, which has resulted in cultural and behavioural change:

Benefits of WSUD are understood

Increased awareness and understanding of benefits of WSUD and how it can be implemented.

WSUD in policy & strategy

Performance-based WSUD and green infrastructure (GI) policies are embedded within the SA planning strategies, systems and associated guidelines.

Informed decision makers

Organisational culture embraces the inclusion of WSUD in future investments.

Effective application

Practitioners apply best practice WSUD and IWM strategies effectively to achieve desired water quality, flood management, water conservation and urban greening objectives.



2.1. Our framework

The Water Sensitive SA program has been developed under a logical framework drawing upon the outcomes of extensive consultation with our partners and practitioners.

We will bring about a cultural shift in which WSUD is widely recognised and embraced, and provide practitioners with guidelines, tools and training to inspire and facilitate the delivery of world-class projects and developments.

Enabling factors to support the transition to a water sensitive community described by Brown (2007) that have also guided our program development include: Socio-political capital; champions; accountability; trusted and reliable science; market receptivity; bridging organisations; and binding targets.

Our deliverables and key actions are detailed in Section 4.

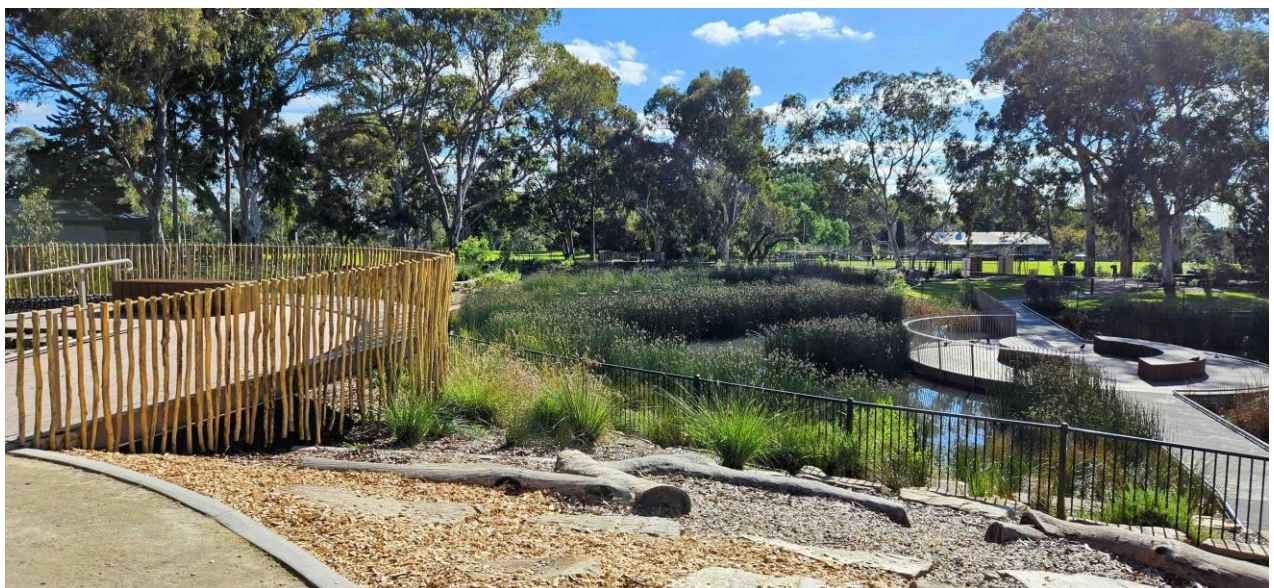
“It’s great that Water Sensitive SA exists and has become a respected industry leader - Well done!” 2024 program partner feedback

We frame our work around the following principles/practices:

- skill development
- communities of practice
- applied research
- accessible resources
- efficiency of systems
- environmental, social and economic benefits of WSUD
- cooperation across jurisdictions.

As the hub of WSUD activity and learning in South Australia, Water Sensitive SA provides:

- WSUD policy development and implementation pathways
- networking opportunities and peer-to-peer learning on strategic, policy and technical matters
- specialist training to address key knowledge and skills gaps
- more accessible WSUD research for practitioners
- resource development, including guidelines and tools
- information sharing through our website, e-newsletter and articles.

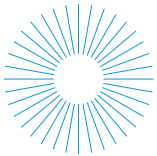


Kensington Wama/Kensington Gardens Reserve wetlands. Image: Water Sensitive SA



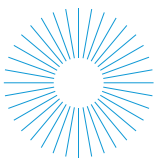
3. Priorities for 2024-25 to 2026-27

The Water Sensitive SA program for 1 July 2024 to 30 June 2027 reflects our partners' feedback from the business planning workshop and a wider stakeholder survey, both undertaken in April 2024. These engagement activities have provided clear direction on areas of focus, which have been curated into the following four work packages:



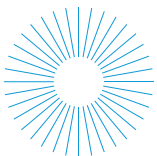
WSUD asset management

Support the asset management system for WSUD features at multiple interventions to sustain long-term investment, maintenance and renewal of high-performance WSUD assets.



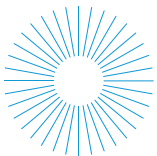
Water sensitive development & infrastructure

Maximise opportunities to integrate WSUD as standard in all developments including from the residential lot scale to master planned communities, commercial sites and industrial precincts, as well as a range of public infrastructure and asset renewal projects.



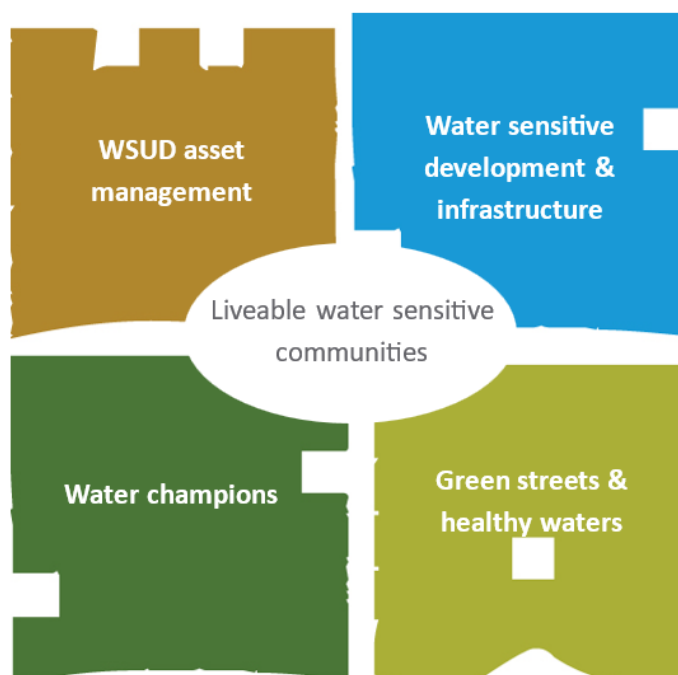
Water champions

Leverage exemplar partners, projects and practitioners to showcase what is possible, and develop strong communities of practice that sustain best practice water and stormwater management.



Green streets and healthy waters

Collaborate with partners and stakeholders to deliver multiple outcomes and create resilient, green and healthy urban environments.





3.1. Delivering on our objectives

Our objectives focus on delivering projects, activities and resources that are measured against a set of outcomes which indicate the program’s long-term strategic success.

In 2024, program partners identified four central themes as crucial to enhancing their capacity to mainstream the adoption of WSUD and integrate sustainable water management into their organisations, work practices and professional skillset. We have shaped this direction into four distinct key work packages and these priorities are aligned to our objectives, outcomes and investment for the period 2024-27 as shown below.

Key work package	WSUD asset management	Water sensitive development & infrastructure	Water champions	Green streets & healthy waters
Benefits of WSUD are understood <i>Increased awareness and understanding of benefits of WSUD and how it can be implemented</i>				
Outcome 1.1 Decision makers understand the multiple benefits of WSUD over a range of scales	■		■	■
Outcome 1.2 WSUD resources, tools and online learning channels are showcased and accessible to a range of audiences	■	■	■	■
Outcome 1.3 WSUD knowledge is shared widely to boost community support for the social, cultural, economic and environmental benefits it provides		■	■	■
Informed decision makers <i>Organisational culture embraces the inclusion of WSUD in future investments</i>				
Outcome 2.1 Urban water leaders are supported to influence audiences, effect organisational change and ingrain WSUD within their profession	■	■	■	■
Outcome 2.2 Partners have the tools and capability to support WSUD developments that benefit their communities	■	■		■
Outcome 2.3 Professional networks create strong communities of practice			■	
Outcome 2.4 The economic benefits of WSUD are quantified and utilised in projects, asset management frameworks and business cases	■			■
Outcome 2.5 The whole-of-life costs of WSUD assets are understood and integrated in asset planning systems	■			■
Outcome 2.6 Asset maintenance programs are resourced to ensure WSUD features perform effectively	■			■



Key work package

WSUD asset management

Water sensitive development & infrastructure

Water champions

Green streets & healthy waters

WSUD in policy & strategy

Performance-based WSUD and green infrastructure (GI) policies are embedded within the SA planning system and associated guidelines

Outcome 3.1

State and local government strategies, policies and guidelines embed WSUD and integrated water management principles



Outcome 3.2

Modern frameworks are applied to private and public realm stormwater management to enhance existing planning and development policies



Outcome 3.3

Online tools and guidelines to manage stormwater quality and quantity are actively used by practitioners and partners



Effective application

Practitioners apply best practice WSUD and IWM strategies effectively to achieve desired water quality, flood management, water conservation and urban greening objectives

Outcome 4.1

Practitioners have the knowledge and skills to effectively plan, design, construct and maintain WSUD assets



Outcome 4.2

Developers and the building industry effectively apply WSUD within their developments



Outcome 4.3

Councils effectively construct WSUD assets as standard in renewal and capital works budgets, and these assets function as designed



Outcome 4.4

Strong collaboration with researchers and experts underpins the adoption of WSUD



Pasadena Biodiversity Corridor, swale and daylighting of creek. Image: Water Sensitive SA



4. Capacity building activities

Building capacity

Water Sensitive SA offers a range of flexible approaches to learning. Practitioners looking to enhance their knowledge and capability in WSUD planning, design, construction and maintenance can do so in the following ways:

- attend one of our scheduled [training, seminars or workshops](#)
- participate in our free [online training and seminars](#) courses
- join our communities of practice
- coordinate with colleagues to arrange in-house training.
- host a Water Sensitive SA technical support officer at their organisation (short term)

Target audiences

Partners

Central to our program is providing specialised support to partners, including dedicating resources and services to enable integration of WSUD and integrated water management across their business. The creation of specific tools and knowledge that close gaps, extend their professional capacity and establish long term organisational change is a key priority

“Water Sensitive SA is a very valuable resource for us, and the knowledge sharing has been fantastic.” 2024 program partner feedback

Stakeholders

Industry-wide benefits are achieved through participation in knowledge activities, networking, and sharing resources developed by the Water Sensitive SA program. We contribute to the broad adoption and mainstreaming of WSUD,

curating website resources, case studies and practical tools for our partners, practitioners, and other industries, associations and institutions.

Practitioners

Water Sensitive SA will continue to offer technical training and seminars to provide opportunities for peer-to-peer learning (including site visits), and research translation. Building the knowledge and skills base of South Australian WSUD practitioners is one of the primary objectives of Water Sensitive SA. We aim to develop a common understanding of the challenges and solutions associated with the planning, design, construction and maintenance of WSUD elements.

Our training program offers professional development to provide a more consistent and effective approach to WSUD and support the industry performance against best practice standards.

The seminars and workshops provide an opportunity to establish a community of practice with access to latest research and peer-to-peer learning of WSUD practice that has worked well, and the challenges and learnings of putting WSUD into practice.

Priority capacity building topics for the 2024-25 financial year will focus on expanding access to existing tools, knowledge and resources; facilitating adoption of available guidelines, policies and standard practices; and creating strong partnerships across industries and agencies who share our objectives and have strategic imperatives aligned with a more water sensitive Adelaide.

Community

Water Sensitive SA has now trained over 450 members of the community in how to integrate WSUD elements into their new builds or retrofit of existing homes and gardens. Digital resources, online knowledge and access to workshops, webinars and activities will further embed the community's understanding of the benefits of WSUD in their neighbourhood.



4.1. Activities & audiences

	Partners	Stakeholders	Practitioners	Community
WSUD asset management				
Facilitate the uptake of <i>WSUD Inspection and maintenance guidelines</i> through training and resources, to optimise functionality and performance of WSUD assets	✓		✓	
Support the development of IPWEA practice notes for WSUD assets to meet the needs of our partners and stakeholders	✓	✓	✓	
Embed WSUD principles and approaches into infrastructure guidelines and technical manuals to standardised design, construction, maintenance and renewals of WSUD assets	✓	✓	✓	
Advocate for WSUD standard drawings to be adopted as a valuable partner resource	✓		✓	
Educate partners and broader stakeholders to increase WSUD lifecycle knowledge, including the environmental, social and economic benefits of investment in WSUD assets	✓		✓	
Water sensitive development & infrastructure				
Promote and support the utilisation of existing tools, resources and guidelines for water sensitive development planning and assessment	✓		✓	✓
Provide a development application expert advisory service to partners to help them build their capacity to integrate WSUD in the private realm	✓		✓	
Create a stormwater contribution scheme framework as a modern approach to managing land use changes in urban areas	✓	✓	✓	
Water champions				
Lead the Urban Water Leaders Program to develop next generation practitioners in best practice water management	✓		✓	
Facilitate access to WSUD practitioners, experts and champions through digital resources and procurement systems	✓	✓	✓	✓
Showcase exemplar WSUD projects demonstrating Adelaide's capability in WSUD	✓	✓	✓	✓
Lead communities of practice, building strength across industries and practitioners	✓	✓	✓	
Support partner water champions to embed WSUD principles and practices within their organisations in collaboration with key decision makers	✓			
Leverage the WSSA Steering Committee to mainstream WSUD through professional networks with aligned interests	✓	✓	✓	
Green streets & healthy urban waters				
Promote WSUD as critical infrastructure for a cooler, greener city through integrated planning and delivery of key objectives and policies	✓	✓		✓
Support partners to leverage grant funds to support WSUD, biodiversity sensitive urban design and climate adaptation projects to accelerate investment and implementation	✓			✓
Support First Nations voice and knowledge of water through inclusive and collaborative partnerships and learning opportunities	✓	✓		✓
Promote the environmental values of urban creeks and waterways, protecting them from pollution and enhancing their ecosystem services	✓	✓	✓	✓
Scale up WSUD capacity building activities to support metropolitan-wide strategies to achieve a resilient and water secure city	✓	✓	✓	✓



Program outputs

WSUD asset management

- Asset management practice note for WSUD assets (IPWEA)
- In-house support for the adoption of WSUD Inspection and maintenance guidelines and e-form
- WSUD assets standard unit rates for costs and benefits
- Online digital training resources

Water sensitive development & infrastructure

- Stormwater Contribution Scheme Framework
- WSUD development policy
- Online digital training resources

Water champions

- Next generation Urban Water Leaders program
- Interactive case studies
- Digital exemplar projects showcase

Green streets & healthy waters

- First Nations water knowledge sharing and perspectives
- Stormwater pollution prevention management compliance training and resources
- Curated audio-visual resources for target audiences
- WSUD standard drawings

Program partners

2023-24 investment partners: Green Adelaide, City of Adelaide, City of Burnside, Campbelltown City Council, City of Charles Sturt, Town of Gawler, Light Regional Council, City of Marion, City of Mitcham, Mount Barker District Council, City of Onkaparinga, City of Playford, City of Port Adelaide Enfield, City of Prospect, City of Salisbury, SA Water, City of Tea Tree Gully and City of Unley.

In addition, significant support has been provided by Department for Environment and Water, Water Sensitive Cities Australia and City of West Torrens.

The University of South Australia provides the evidence base for many of our activities, which is valuable in-kind support for the program.

Program Partners



Project Partners



Figure 4.1 Program investment partners 2023-24



5. Program management

Governance

Water Sensitive SA program development and implementation is overseen by a Steering Committee consisting of nine leaders in the fields of engineering, planning, landscape design and research. This committee is responsible for setting the program's strategic direction and acting as its ambassadors. Appointed Steering Committee members of this business plan are:

- Elsie Mann (Chair)
- Alison Collins
- Alex Czura
- Andrew King
- Joe La Spina
- Rachel Murchland
- Olivia Oliver
- Sheryn Pitman
- Angus Rex

Program delivery model

The Water Sensitive SA program is delivered under a service contract with Green Adelaide, which is managed by the Department for Environment and Water (DEW) on behalf of the program partners. The Program Director is responsible for delivery of the program, together with a team of specialists who undertake work package activities to achieve the program objectives.

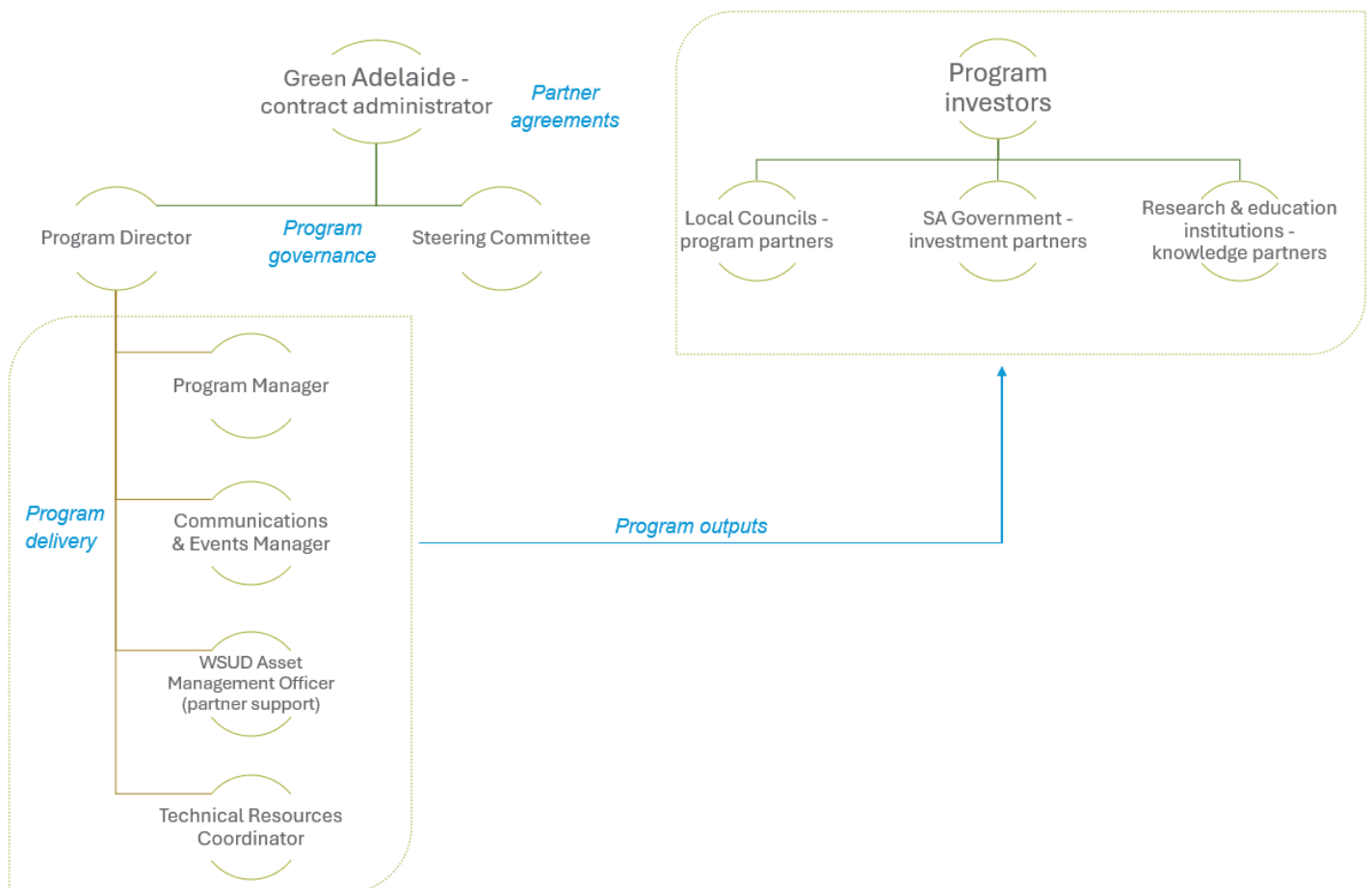


Figure 5.1 Water Sensitive SA Governance structure



6. Investment & expenditure

6.1. Investment

The budget estimates provided below are based on the current level of investment from Water Sensitive SA partners and prospective partners and is subject to the execution of formal grant agreements between Green Adelaide and the relevant partners.

Projected income estimates summary

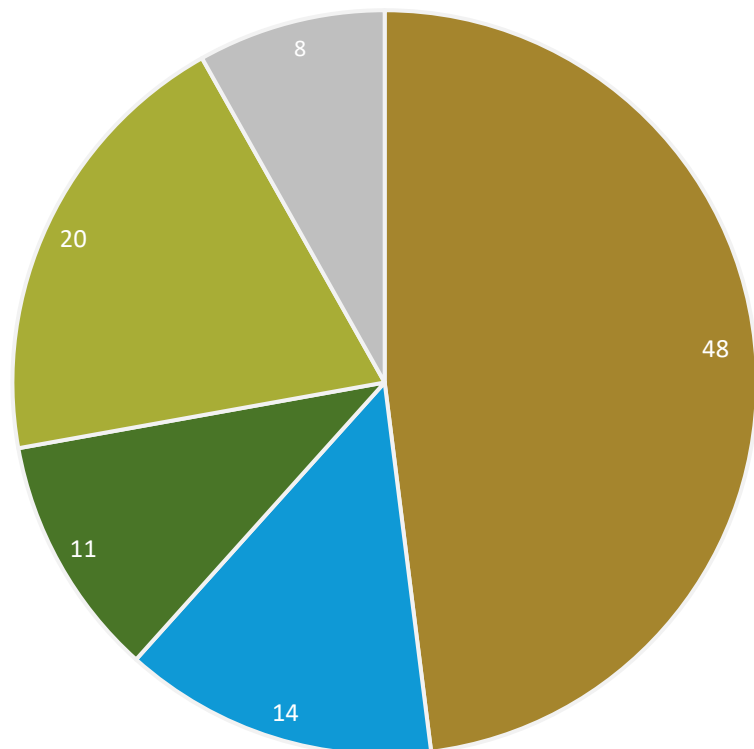
Investor	2024-25	2025-26	2026-27
Green Adelaide	150,000	280,000	290,000
Local Councils	126,000	148,000	170,000
State agencies	30,000	36,000	45,000
Industry associations	10,000	12,000	15,000
Total income	\$316,000	\$476,000	\$520,000

Note: Estimated income is subject to negotiation and executed grant agreements and excludes cost recovery activities

Projected investment in program activities

Work package
investment share
(%)

- WSUD Asset Management
- Water Sensitive Infill & New Development
- Water Champions
- Green Streets and Healthy Urban Waters
- Program Operations





6.2. Expenditure

Expenditure estimates are prepared based upon the expected level of investment required to deliver the entire program and activities planned to be delivered. Details are outlined in the table below.

Table 6.1. Estimated program expenditure

Expenditure	2024-25	2025-26	2026-27	Total
Program Management	35,000	58,000	75,000	168,000
Partner Technical Support and Engagement	113,000	144,000	143,000	400,000
Research and Adoption Pathways	16,000	9,800	15,000	40,800
Technical Resources	55,500	137,000	115,000	307,500
Training and Communities of Practice	53,000	83,000	116,000	252,000
Communications	22,000	26,000	38,000	86,000
WSUD/IWM Policy and Advocacy	13,000	13,000	13,000	39,200
Operating Expenses ¹	22,000	24,000	27,000	73,000
Total	\$326,900	\$494,600	\$540,200	\$1,361,700

¹ Maintenance agreements/licensing – InSite Water Tool, Music Auditor Tool

Subject to confirmation of funding partners and grants (or similar)

Expenditure includes activities with a cost recovery component





7. Evaluation framework

Program reporting and evaluation

To ensure the Water Sensitive SA capacity building program is constantly evolving to respond to the needs of its partners and broader practitioners, the method of evaluation will include:

- monthly reporting to Green Adelaide on program activities and financial statement
- quarterly reporting to program Steering Committee on program metrics and financial statement
- annual review of program deliverables to confirm the following year's schedule of activity
- annual partner and stakeholder feedback via targeted engagement activities
- a formal review of program performance against success indicators.

Program metrics

To monitor the implementation of activities and keep informed of resources developed, used and accessed by partners and stakeholders, a set of metrics tracks key figures and provides insight into the delivery of the program.

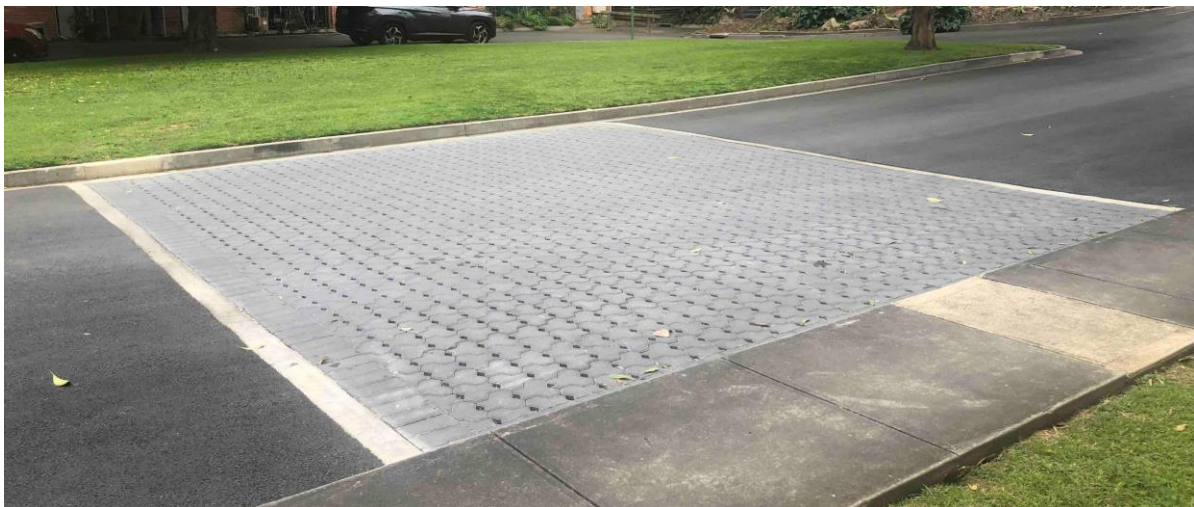
Success Indicators

Evaluating the outcomes of the program and identifying where sustained change has occurred will help to best measure program success. A set of annual measures will articulate our performance in achieving our strategic directions.

Program risk analysis

A risk analysis has been undertaken to ensure that risks to the quality of program deliverables and the overall longevity of the program are adequately managed.

The likelihood, consequence and risk rating tables used in the risk analysis are provided in our *Program risk assessment* document, available on request.



Retrofit of permeable paving in driveway of residential apartments. Image: Water Sensitive SA