Western Riverina Stormwater and Wastewater Management Strategy

Reviewing Stormwater and Sewerage systems to maximise water reuse for a resilient Western Riverina

Western Riverina Consortium

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LEETON SHIRE COUNCIL

Murrumbidgee COUNCIL

Narrandera Shire Council

Executive Summary

Water is central to life and prosperity across the Western Riverina, sustaining our farms, towns and natural environments.

The Western Riverina Stormwater and Wastewater Management Strategy was developed to deliver on Action 1.4 of the Regional Drought Resilience Plan (RDRP)—

"Councils to review stormwater management and town sewerage discharge strategies and approaches to maximise opportunities for reuse of water resources."

This Strategy takes that directive forward, focusing on practical ways to strengthen water resilience and prepare the region for future dry periods.

Developed through a staged process combining detailed technical analysis with collaboration across the four councils, the Strategy examines how stormwater and wastewater are currently managed across the region. It identifies where improvements could best support local priorities, and assesses each option against shared criteria reflecting economic sustainability, community liveability, environmental health and water resilience – ensuring that the final outcomes balance the needs of our economy, communities and environment.

Fourteen potential opportunities were assessed, with the shortlisted options representing early priorities for further exploration. Other projects may also progress over time as feasibility and community needs evolve. Engagement to date has focused on technical and economic feasibility, with broader consultation to follow as concepts develop.

The result is a plan shaped by evidence, collaboration and regional insight. It reflects the Western Riverina's cooperative spirit and shared commitment to practical action, including continued collaboration with Griffith City Council on opportunities such as recycled water use for farming and improving the quality of local water bodies. Together, these early priorities provide a clear, regionally informed pathway for strengthening water resilience and delivering the goals of the RDRP.

The following page provides a high-level overview of the four prioritised options, illustrating how councils are collectively responding to Action 1.4 of the Regional Drought Resilience Plan.

Image: Carla Gottgen

Executive Summary Continued

These four opportunities represent the most promising early priorities, identified for their strong alignment with regional goals and potential to deliver balanced economic, community, and environmental benefits.

Murrami Water Supply

Murrami's small water treatment plant requires extensive modernisation to continue supplying quality drinking water as population and demand grows. Alternatively, connecting to the larger Leeton system through new pipelines would secure a reliable and sustainable supply, lower operating costs, and remove the need to upgrade the local facility.

Price to be determined at project inception

Fivebough Wetlands Protection through Treatment Plant Optimisation

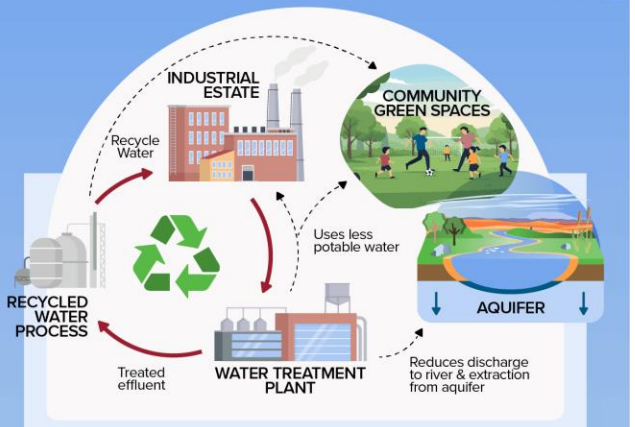
The Ramsar-listed Fivebough Wetlands rely on water from the Leeton Sewage Treatment Plant (STP), which faces quality and compliance challenges, particularly with phosphorus bacteria and other pollutants. Upgrading the STP would improve discharge quality, protect biodiversity, and support tourism, education, and recreation while meeting environmental and public health standards.

$750K - $1.5M
Order of Magnitude Cost

Lake Jerilderie Stormwater Harvesting

Lake Jerilderie is a valued community space that relies on costly general and high-security water to maintain amenity, placing pressure on limited allocations. Redirecting stormwater to the lake through new infrastructure would free up high-security water for farming or trade and maintain the lake for community wellbeing and tourism.

~$1M
Order of Magnitude Cost



Recommissioning the Narrandera Reuse Scheme

Narrandera's recycled water scheme, designed to irrigate green spaces and support industry, is currently underused. Recommissioning and expanding it would provide a reliable alternative water source, improve environmental outcomes, and reduce reliance on the Murrumbidgee River and groundwater.

$8M - $12M
Order of Magnitude Cost

Image: Meg Hollins

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The story of our region and the value of water in our shared future

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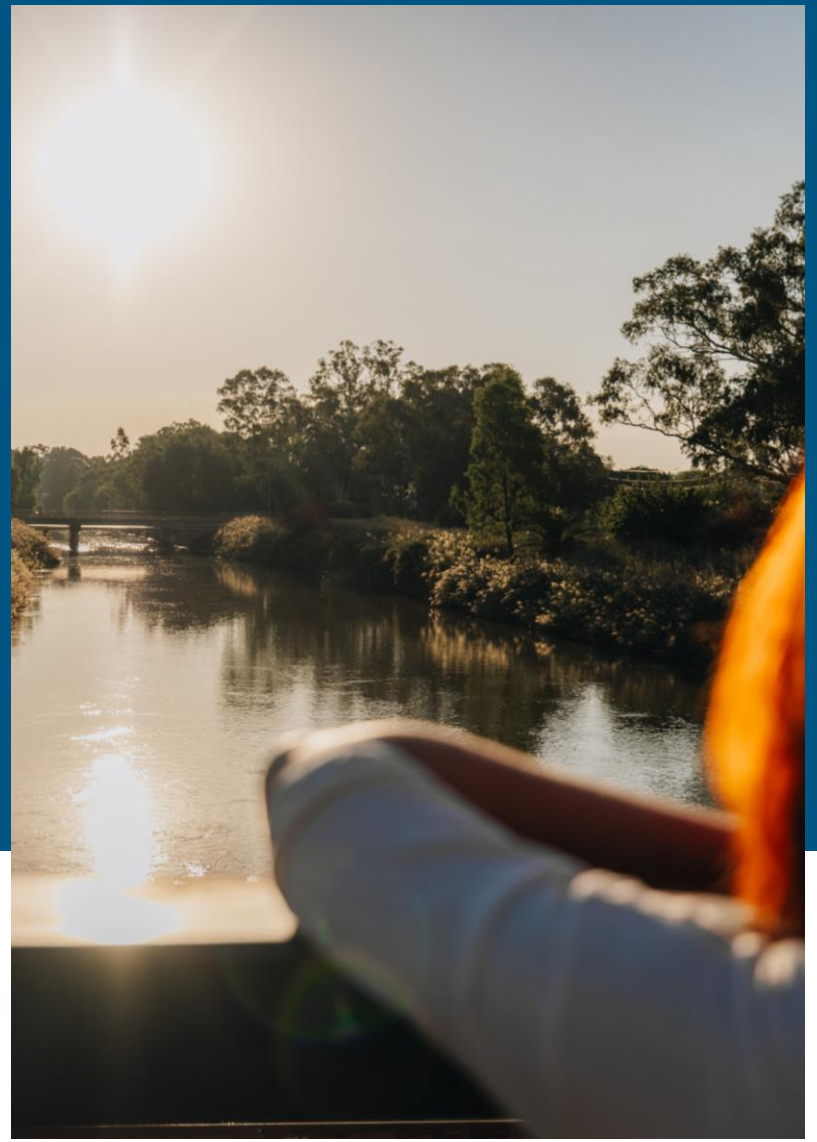
01 Our Story



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Building on our Drought Resilience Plan

Moving from planning to practical steps that strengthen water resilience across the Western Riverina.

The Western Riverina — part of Australia's broader food bowl — plays a vital role in feeding the nation. Across its farms, towns and industries, water sustains around 24,000 jobs and contributes more than $3.5 billion each year through agriculture, manufacturing, utilities, health and education.

Our prosperity and quality of life depend on reliable water resources drawn from the Snowy Scheme and the Murrumbidgee Irrigation Area via Blowering and Burrinjuck Dams. These systems have long supported our communities, but are increasingly tested by drought, climate variability, changing policy and ageing infrastructure.

Building on the Regional Drought Resilience Plan (RDRP), the Western Riverina Stormwater and Wastewater Management Strategy moves from planning to implementation — reviewing how water is used, managed and reused across the region.

The Strategy and Action Plan:

> Assesses how stormwater and wastewater are currently managed across the four councils.
> Identifies opportunities for greater reuse and efficiency.
> Sets out a practical roadmap of actions to guide implementation.

It is designed to guide decision-making at both regional and local levels, giving each council clear priorities to strengthen water security and resilience into the future. In doing so, it reflects the RDRP pathways of absorbing pressures, adapting to uncertainty, and transforming for the future — turning these principles into practical steps for water resilience.

Image: Carla Gottgen

The value of water in the Western Riverina

Protecting what sustains our economy, communities and environment.

The value of water in the Western Riverina

Water is the lifeblood of the Western Riverina. It drives the farms and food industries that make this region one of Australia's premier food bowls, supporting billions of dollars of economic output and thousands of local jobs each year. It sustains our towns, keeping parks, sporting grounds and cultural spaces alive, and it nourishes the wetlands, rivers and landscapes that support biodiversity and provide places of connection for the community.

For First Nations people, water is deeply tied to culture, identity and Country, with important sites such as the Fivebough and Tuckerbil Wetlands continuing to hold cultural and ecological significance.

This unique region benefits not only from local rainfall but also from irrigation waters drawn from the Snowy Hydro Scheme and the Murrumbidgee system, creating some of the nation's most productive agricultural lands. Yet this reliance also brings vulnerability. Water uncertainty is shaped by climate variability, policy changes, and the condition of our infrastructure — including the wastewater, sewerage and stormwater systems that collect, treat and return water to the environment.

Protecting and securing water — across every part of this cycle — is therefore central to protecting what matters most to the Western Riverina: a strong economy, thriving communities and a healthy environment.

Pressures on our water future

The value we place on water is under growing pressure. Climate change is altering long-term patterns, bringing less predictable rainfall and hotter conditions that affect productivity, liveability and the health of ecosystems. Extreme events — droughts, floods and other natural disasters — are becoming more frequent and more costly to recover from, placing stress on households, businesses and natural systems alike.

Population shifts are reshaping the region, reducing revenue in some areas while increasing demand for services in others. At the same time, councils are working with ageing water, wastewater, sewerage and stormwater infrastructure and limited capacity, making it harder to maintain and upgrade essential systems. With a small rate base, major investment depends on funding support from outside the region.

Taken together, these forces test the resilience of our economy, our communities and our environment. They show why it is essential that we act now — aligning with the RDRP and taking the next step to secure the value of water for the Western Riverina's future.

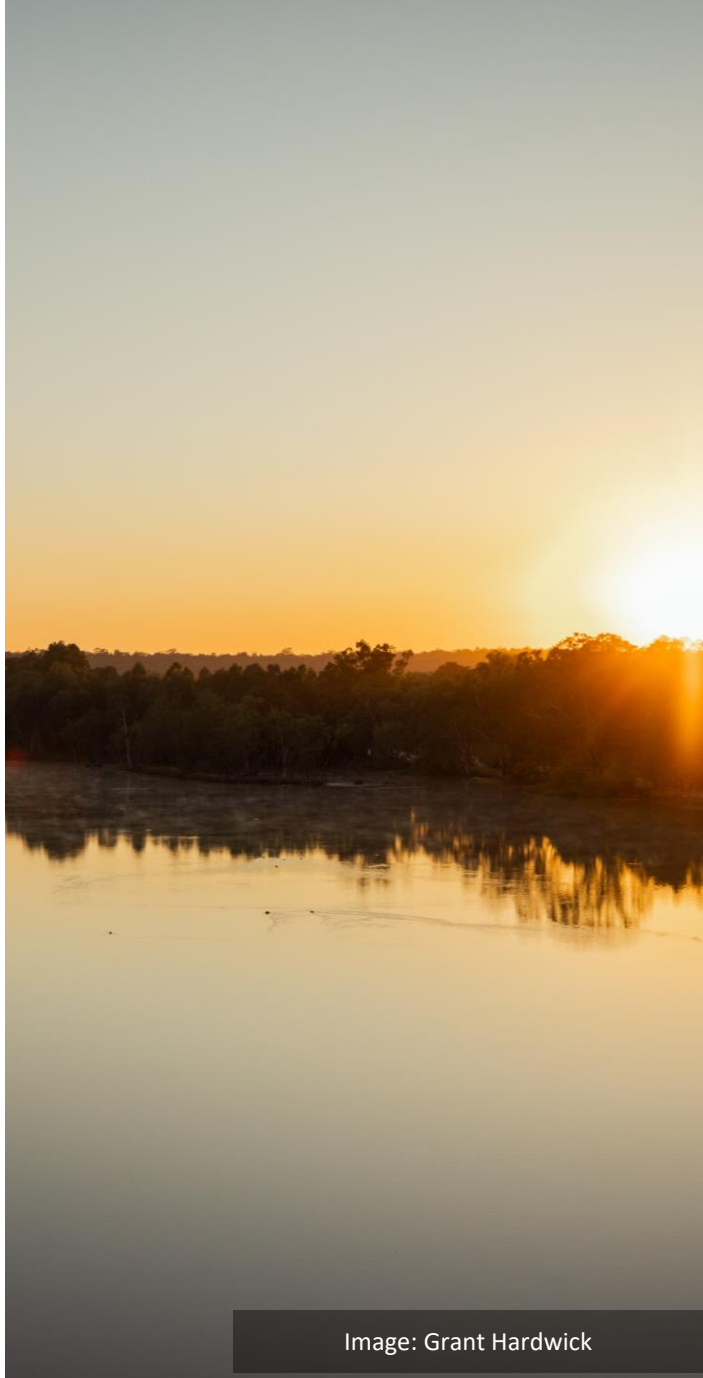

Image: Grant Hardwick

Drought Resilience will ensure regional Australia can endure deeper, longer droughts, and recover from them sooner. This will help Australia's agricultural industries ***maintain national farm income, increase food security, and protect the regional jobs*** *that rely on agriculture during the toughest years. Importantly, it will also increase the resilience of rural and regional communities and improve environmental outcomes*.

(CSIRO, 2022)

Building Resilience Together

Narrandera Shire Council

Narrandera is a proud river town on Wiradjuri Country, home to around 5,800 people. Agriculture is central to the local economy, with strong beef, dairy, grain and sheep production, alongside council's ambitions to attract new residents and industries through projects like the Red Hill Industrial Precinct. Water underpins these goals, keeping green spaces open, schools and parks irrigated, and supporting both community wellbeing and local business growth.


Image: Grant Hardwick

Current wastewater systems

Narrandera's sewage treatment plant processes about one megalitre a day which could be productively reused. Although a reuse network exists, it has not yet been commissioned, so irrigation for parks, schools and sporting fields still relies on groundwater bores.

Pressures

Reuse systems are not yet meeting the standards needed for safe use, which limits recycling benefits and increases reliance on groundwater bores. Hotter, drier conditions are also driving up irrigation demand, while Council balances daily operations with the need for upgrades. Planning is underway to improve the town's drinking water system by removing iron and manganese, which can cause discoloured water.

Opportunities

Activating the reuse scheme would reduce pressure on bores, lower the cost of producing drinking water, and defer the need for major new infrastructure. Extending supply to schools, parks and the industrial estate would support liveability and investment, while longer-term options such as stormwater harvesting and aquifer recharge could strengthen security through future droughts.

Building Resilience Together

Griffith is the largest centre in the Western Riverina and the heart of irrigated farming, food processing, and trade. Water sustains the city's role as a regional hub for business and industry, and keeps community spaces green to bring people together. Lake Wyangan is a local landmark, highly valued for recreation and tourism, and part of what makes Griffith a great place to live.


Image: Griffith City Council

Current wastewater systems

Griffith's water reclamation plant produces recycled water, though much is not yet productively reused. Council also relies on raw and drinking water to keep parks, ovals and schools irrigated. Lake Wyangan's needs vary widely, from little water in wet years to over 2,000 megalitres in very dry ones.

Pressures

Griffith's water demands are increasing, and managing water quality at Lake Wyangan is a growing challenge. Supplying the lake in dry years helps reduce salinity, yet toxic blue green algae outbreaks are more frequent, disrupting recreation. Many public spaces still rely on raw water, while large volumes of recycled water remain underused, creating missed opportunities and adding strain in hotter, drier conditions.

Opportunities

Greater use of recycled water would reduce dependence on raw supplies and keep parks, schools and sporting fields green. A clear plan for Lake Wyangan would protect a valued community space while supporting tourism and recreation. Establishing a Council-owned farm could also use recycled water productively and deliver local benefits. Together, these steps would build resilience and help Griffith thrive through future droughts.

Building Resilience Together

LEETON SHIRE COUNCIL

Leeton is the second largest centre in the Western Riverina, known for its citrus, rice, grape, nut and grain industries. Water supports the shire's farms, sustains local business, and helps maintain natural and cultural assets like the Fivebough and Tuckerbil Wetlands — internationally significant for bird habitat.

Image: Carla Gottgen

Current wastewater systems

Leeton's main Sewage Treatment Plant (STP) on Fivebough Road discharges treated effluent to the Fivebough Wetlands under an EPA licence. Wastewater systems also operate in Yanco and Whitton, with reticulated services in other areas. Council maintains stormwater systems to manage runoff, reduce flooding, and ease pressure on Murrumbidgee Irrigation's channels, helping to lower development costs.

Pressures

The STP needs upgrades to meet licence standards for nutrients, pH and pathogens, while stormwater and flooding risks are increasing with heavier rainfall, urban development and variable rainfall patterns. Limits on discharges to Murrumbidgee Irrigation channels add further costs for developers through larger detention basins, but stormwater harvesting offers a way to ease these pressures and create shared public spaces.

Opportunities

Upgrading the STP would improve compliance and support reuse of treated effluent, including maintaining healthy wetlands. The wetlands provide economic, social and environmental value to the region. Improved stormwater capture could further reduce flood risk, supply green spaces, and deliver community benefits.

Building Resilience Together

Murrumbidgee COUNCIL

Murrumbidgee is a rural shire that includes the towns of Coleambally, Darlington Point, and Jerilderie. Agriculture is central to the local economy, while water also sustains lakes, parks, and community spaces that bring people together. Lake Jerilderie is highly valued for recreation and tourism, making it an important part of local life.


Image: Karen Kalon

Current wastewater systems

Jerilderie's Sewage Treatment Plant (STP) achieves full reuse by irrigating the neighbouring racecourse, while urban runoff also flows into Lake Jerilderie. The lake is manmade and requires regular top ups to sustain its volume. At Coleambally, a small pond system is used with evaporation, while Darlington Point's plant services the township and provides water to adjacent landholders.

Pressures

Maintaining Lake Jerilderie places ongoing pressure on council, as its water needs vary with climate and can be significant in dry years. Coleambally's evaporation system provides little opportunity for beneficial reuse, and the small scale of each township means limited resources are available to invest in upgrades.

Opportunities

Harnessing stormwater to supplement Lake Jerilderie would secure its water levels, protecting a popular community asset that underpins recreation and tourism. By maintaining a healthy lake, Murrumbidgee can strengthen local resilience and ensure water continues to play a central role in community life.

02 Our Approach

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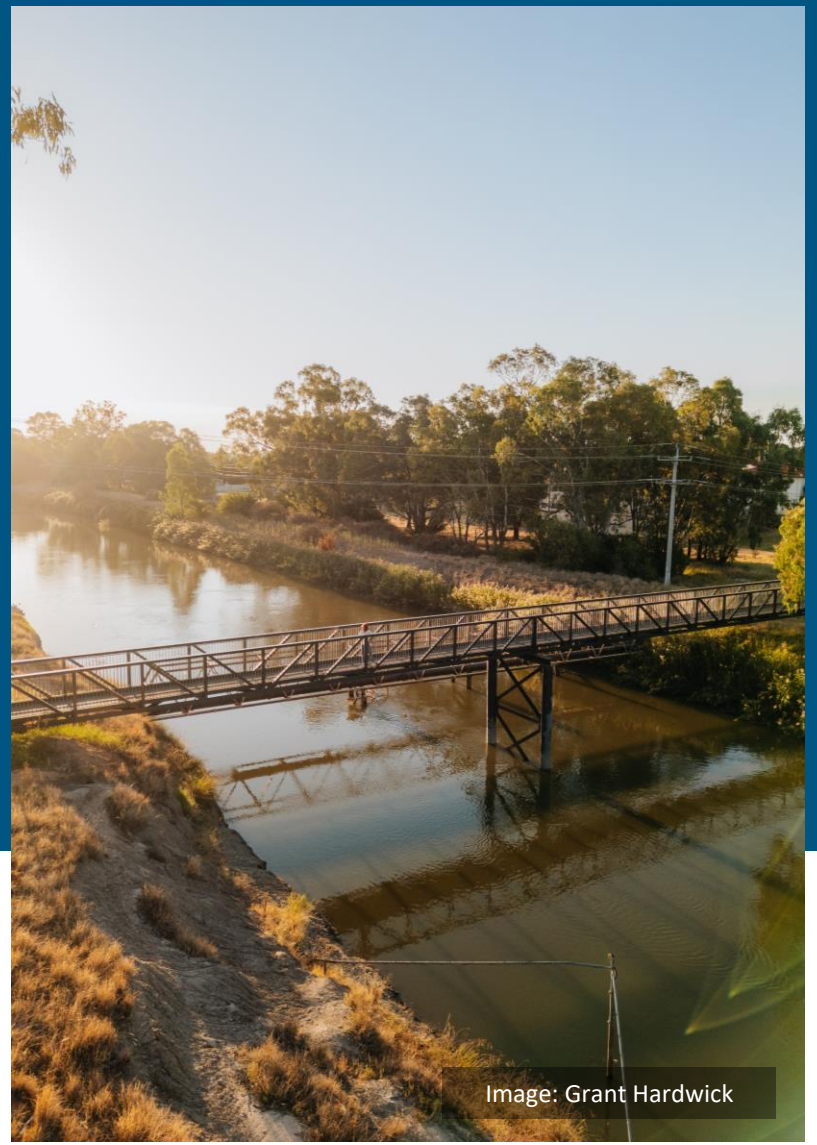

Image: Grant Hardwick

Shaping the Strategy Together

A process that combined technical review with local voices to create a practical and balanced strategy.

This strategy was developed through a staged process that combined technical review with the voices of councils and communities. The first step was to review existing studies and past investigations to capture the breadth of ideas already raised across the Western Riverina. The project team then spent time in the region visiting sites and meeting with council staff. These visits provided a clearer picture of local conditions, opportunities and challenges, and helped to shape a long list of potential projects.

A regional workshop then brought the four councils together to confirm what outcomes mattered most for the region and to assess the long list of projects. The discussion was grounded in the priorities of the Regional Drought Resilience Plan, and projects were tested against clear criteria that reflected the balance between economy, community and environment. Through this transparent process, the long list of ideas was refined to a shortlist of priority projects for further development.

The strategy is strengthened by the development of an Investment Logic Model (ILM) and technical report including project overviews, cost estimates and cost benefits analysis (CBA).

The result is a strategy shaped by both evidence and community insight. It reflects local priorities, is grounded in regional strengths, and provides a practical set of actions to build economic opportunity, community wellbeing and environmental resilience in the face of future water challenges.

The assessment criteria (on the following page), was developed and endorsed by the project control group that represented each of the councils and their communities.

Reviewed

50+

Existing documents to inform recommendations

Consulted

12

Key stakeholders across 2 workshops and interviews

Inspected

8

Key facilities and end-use sites to inform

Assessed

14

Opportunities for water reuse and other water-saving measures

Shaping the Strategy Together

Prioritising new and existing solutions against a set of criteria to ensure value and impact.

This strategy considered and assessed 14 new and existing strategies and approaches for stormwater management and town sewage discharge to maximise opportunities for reuse of water resources. Options were assessed based on the extent that they achieved each of the 5 criterion, detailed on the right. The strategies and approaches considered were:

Narrandera Shire Council

- N1 - Commission existing reuse scheme
- N2 - Expand existing reuse scheme
- N3 - Service Narrandera industrial estate
- N4 - Large scale stormwater harvesting scheme
- N5 - Managed qualifier recharge

Leeton Shire Council

- L1 - Enhance Fivebough Wetland via treatment plant optimisation
- L2 - Rationalisation of Yanco to Leeton STP
- L3 - Large scale stormwater harvesting
- L4 – Yanco Landfill Rehabilitation
- L5 - Murami water supply

Griffith City Council

- G1 - Council managed farm
- G2 - Expand existing raw water system

Murrumbidgee Council

- M1 – Lake Jerilderie Stormwater harvesting

The shortlisting criteria were developed and endorsed by the project control group that represented each of the councils and their communities.

Consortia shortlisting criteria

Each project was considered for how it supports our economy, our communities and our environment.

Economic diversity

Broadening opportunities for industry and business.

Council sustainability

Realistic for councils to manage and deliver.

Water productivity

Making the best use of available water.

Liveability

Supporting green spaces, recreation and community wellbeing.

Water resilience

Protecting water quality, ecosystems and long-term supply.

03 Our Priorities

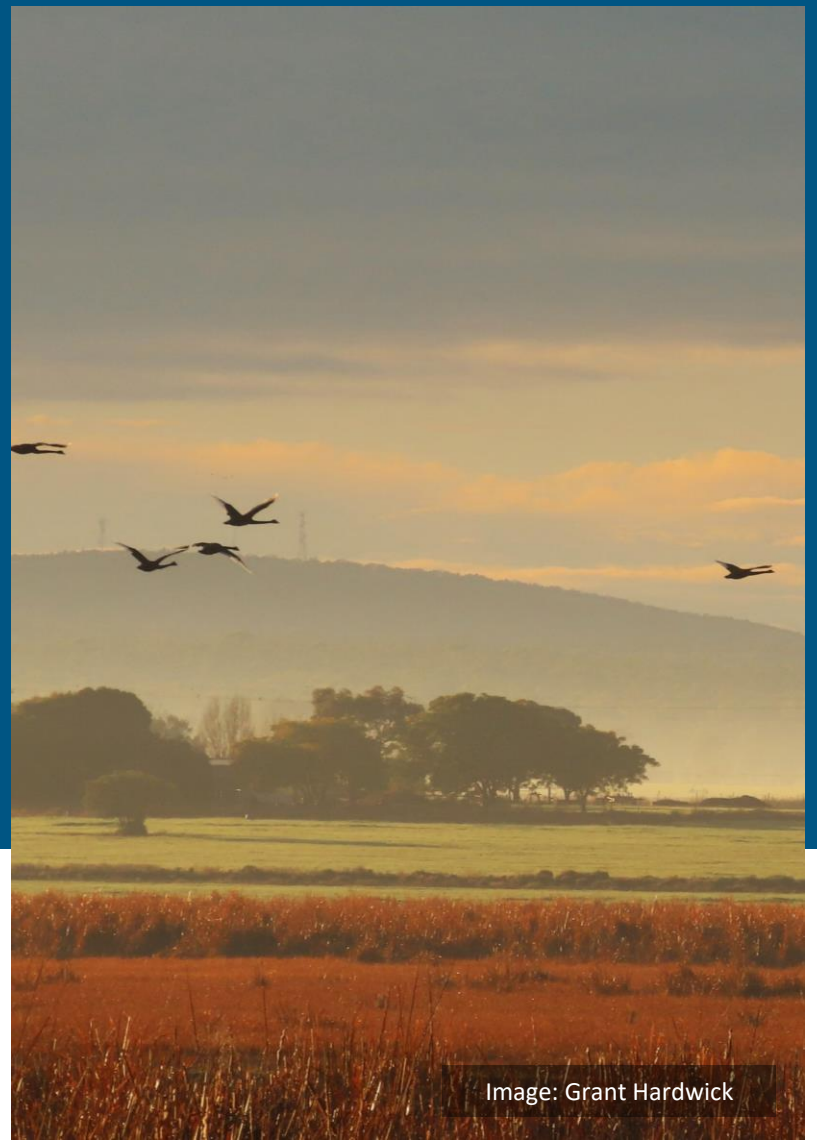
Image: Grant Hardwick

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Prioritised Options Overview

Identifying options that support our economy, our communities and our environment.

As part of the Strategy and Action Plan, each opportunity was reviewed against shared criteria balancing economic, community and environmental outcomes. This process highlighted four early opportunities with strong potential for further development:

- Narrandera Reuse Scheme
- Fivebough Wetlands Protection by Treatment Plant Optimisation,
- Murrami Water Supply, and
- Lake Jerilderie Stormwater Harvesting.

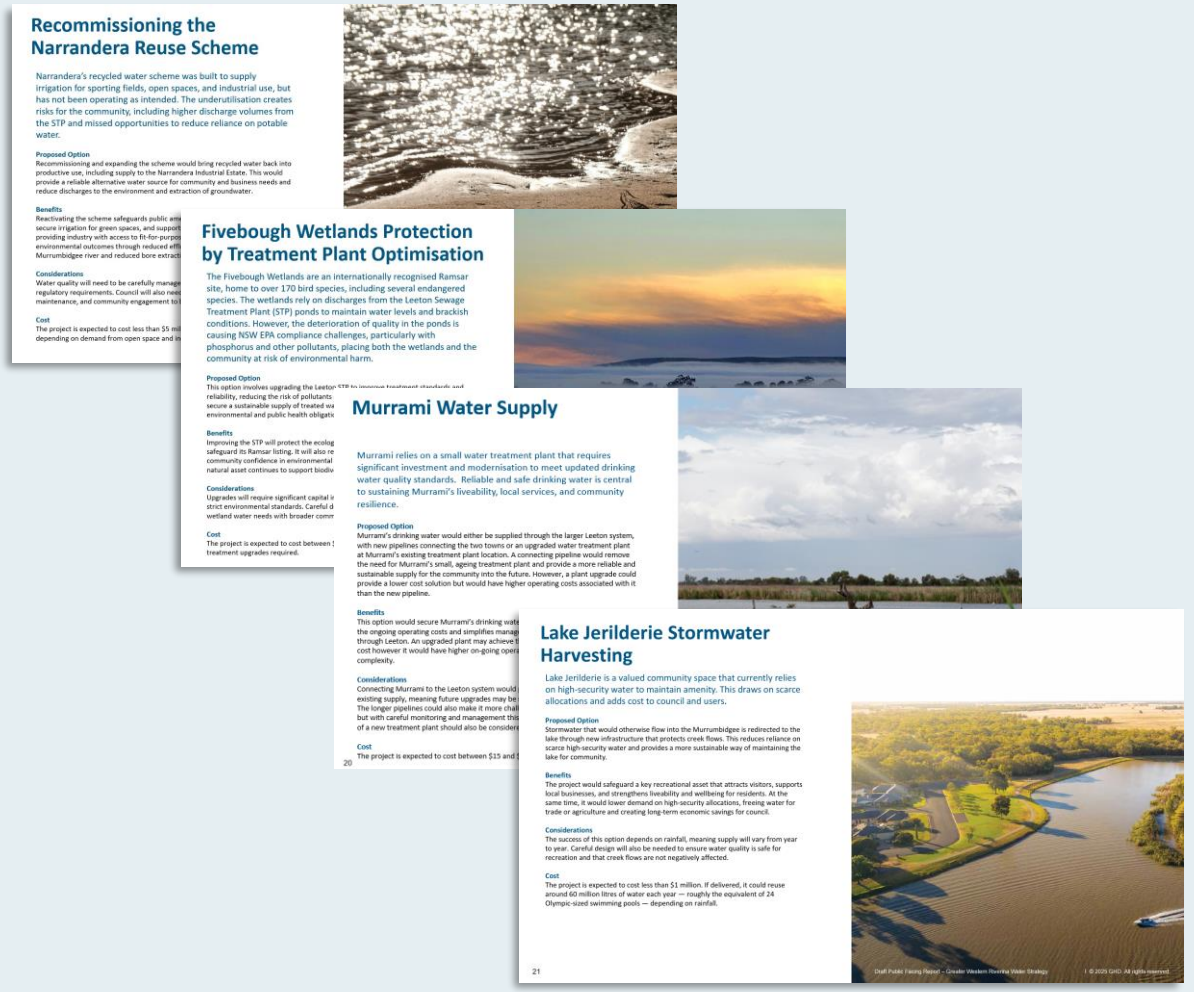
Together, these projects offer practical pathways toward the region's shared goals — building economic diversity, supporting council sustainability, improving water productivity, enhancing liveability and strengthening long-term water resilience. They represent the first step in an evolving program of work, with other opportunities from the broader assessment to be revisited as priorities and conditions change.

Future planning for each initiative will include deeper discussions with councils, communities and stakeholders to test ideas, refine designs and confirm local benefits.

The following pages share these opportunities in more detail, outlining their indicative benefits, considerations and costs.

Four Prioritised Options

Four options were selected for progression following assessment against the shortlisting criteria.



Recommissioning the Narrandera Reuse Scheme

Narrandera's recycled water scheme was built to supply irrigation for sporting fields, open spaces, and industrial use, but has not been operating as intended. The underutilisation creates risks for the community, including higher discharge volumes from the STP and missed opportunities to reduce reliance on potable water.

Proposed Option

Recommissioning and expanding the scheme would bring recycled water back into productive use, including supply to the Red Hill Industrial Precinct. This would provide a reliable alternative water source for community and business needs and reduce discharges to the environment and extraction of groundwater.

Benefits

Reactivating the scheme safeguards public amenity, strengthens liveability through secure irrigation for green spaces, and supports economic development by providing industry with access to fit-for-purpose recycled water. It improves environmental outcomes through reduced effluent discharges to the Murrumbidgee river and reduced bore extraction from the Murrumbidgee Aquifer.

Considerations

Water quality will need to be carefully managed to protect public health and meet regulatory requirements. Council will also need to invest in upgrades, monitoring, maintenance, and community engagement to build confidence in reuse.

Cost

The project is expected to cost $8 to $12 million, with the scale of reuse depending on demand from open space and industry users.

Image: Meg Hollins

Fivebough Wetlands Protection by Treatment Plant Optimisation

The Fivebough Wetlands are an internationally recognised Ramsar site, home to over 170 bird species, including several endangered species. The wetlands rely on discharges from the Leeton Sewage Treatment Plant (STP) ponds to maintain water levels and brackish conditions. It is suspected that as treated effluent travels through the ponds, environmental influences adversely impact the water quality. This project helps to optimise treatment to ensure a consistent quality of effluent water discharge into the wetland.

Proposed Option

This option involves upgrading the Leeton STP to improve treatment standards and reliability, reducing the risk of pollutants entering the wetlands. The scheme would secure a sustainable supply of treated water for the wetlands while meeting environmental and public health obligations.

Benefits

Improving the STP will protect the ecological health of Fivebough Wetlands and safeguard its Ramsar listing. It will also reduce compliance risks for council, improve community confidence in environmental management, and ensure this significant natural asset continues to support biodiversity, tourism, recreation, and education.

Considerations

Upgrades will require capital investment and ongoing management to meet strict environmental standards. Careful design and monitoring will be needed to balance wetland water needs with broader community and environmental priorities.

Cost

The project is expected to cost between $750 thousand and $1.5 million, depending on the level of treatment upgrades required.

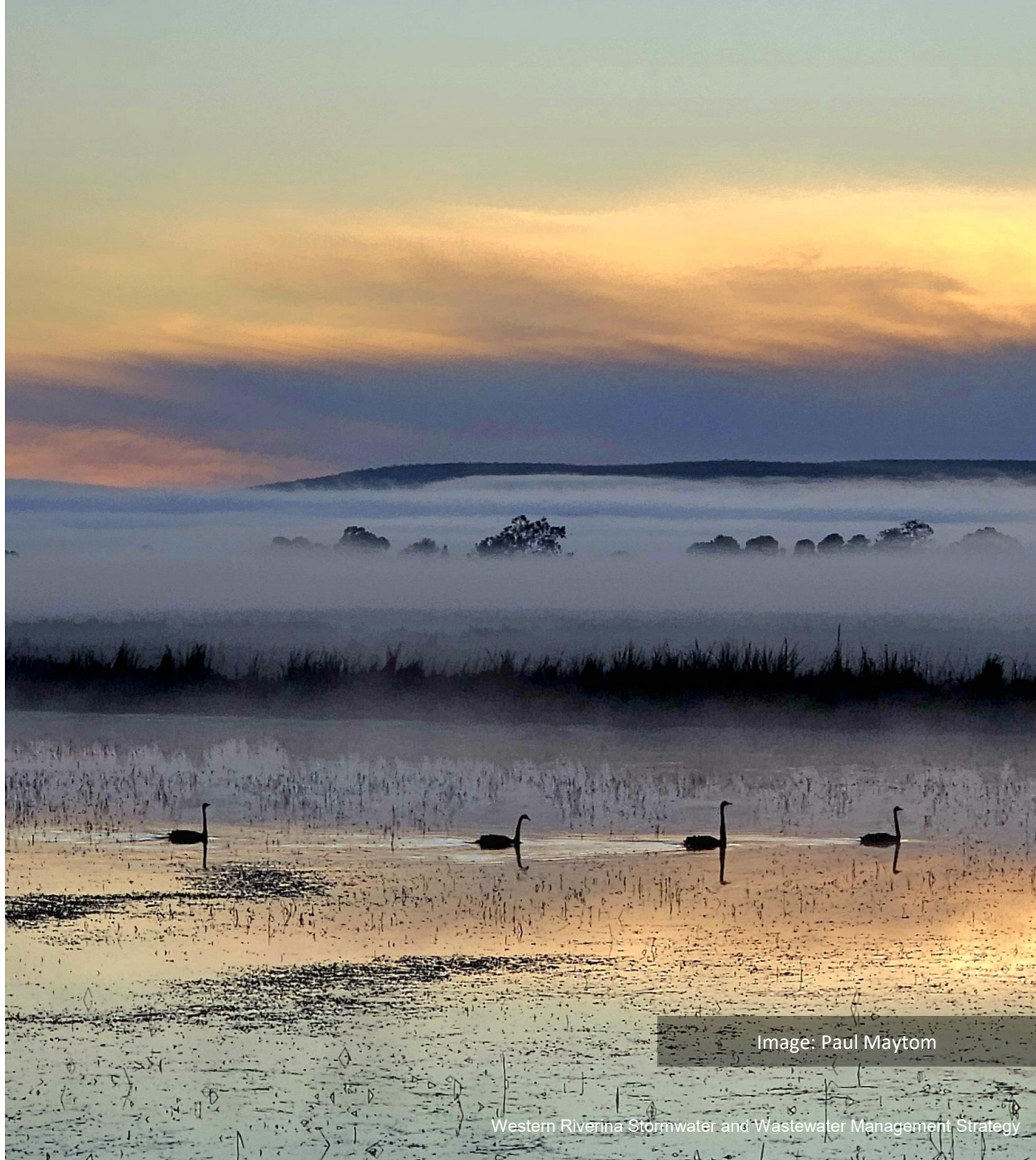


Image: Paul Maytom

Murrami Water Supply

Murrami relies on a small water treatment plant that requires significant investment and modernisation to meet updated drinking water quality standards. Reliable and safe drinking water is central to sustaining Murrami's liveability, local services, and community resilience.

Proposed Option

Murrami's drinking water would either be supplied through the larger Leeton system, with new pipelines connecting the two towns or an upgraded water treatment plant at Murrami's existing treatment plant location. A connecting pipeline would remove the need for Murrami's small, ageing treatment plant and provide a more reliable and sustainable supply for the community into the future. However, a plant upgrade could provide a lower cost solution but would have higher operating costs associated with it than the new pipeline.

Benefits

This option would secure Murrami's drinking water supply. A new pipeline reduces the ongoing operating costs and simplifies management by consolidating supply through Leeton. An upgraded plant may achieve the same water security at a lower cost however it would have higher on-going operating costs and increased operational complexity.

Considerations

Connecting Murrami to the Leeton system would place extra demand on Leeton's existing supply, meaning future upgrades may be needed to keep pace with growth. The longer pipelines could also make it more challenging to maintain water quality, but with careful monitoring and management this can be addressed. Operating costs of a new treatment plant should also be considered.

Cost

Price to be determined at project inception

Image: Carla Gottgen

Lake Jerilderie Stormwater Harvesting

Lake Jerilderie is a valued community space that currently relies on high-security water to maintain amenity. This draws on scarce allocations and adds cost to council and users.

Proposed Option

Stormwater that would otherwise flow into the Murrumbidgee is redirected to the lake through new infrastructure that protects creek flows. This reduces reliance on scarce high-security water and provides a more sustainable way of maintaining the lake for community.

Benefits

The project would safeguard a key recreational asset that attracts visitors, supports local businesses, and strengthens liveability and wellbeing for residents. At the same time, it would lower demand on high-security allocations, freeing water for trade or agriculture and creating long-term economic savings for council.

Considerations

The success of this option depends on rainfall, meaning supply will vary from year to year. Careful design will also be needed to ensure water quality is safe for recreation and that creek flows are not negatively affected.

Cost

The project is expected to cost approximately $1 million. If delivered, it could reuse around 60 million litres of water each year — roughly the equivalent of 24 Olympic-sized swimming pools — depending on rainfall.

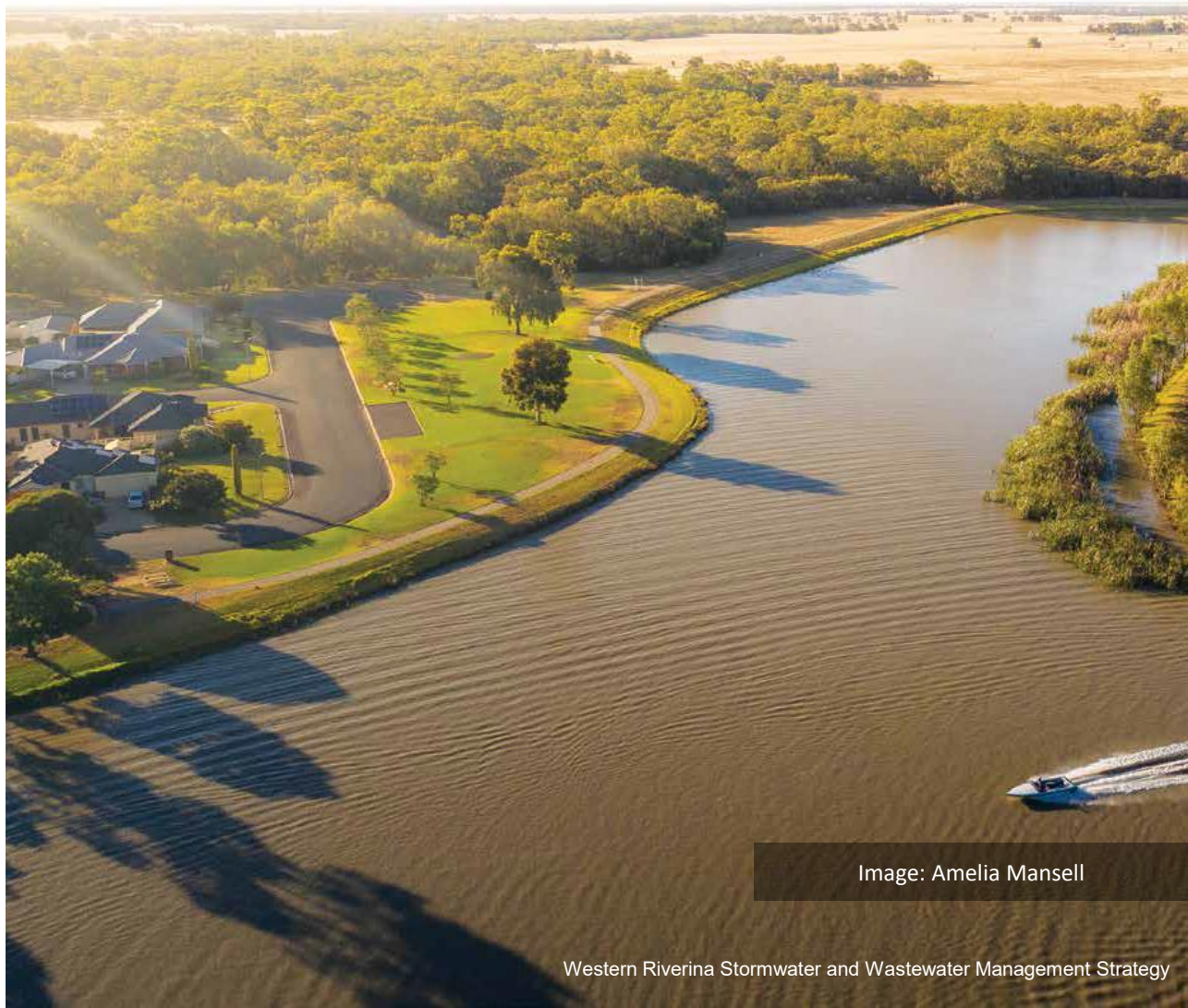


Image: Amelia Mansell

04 Our Action Plan

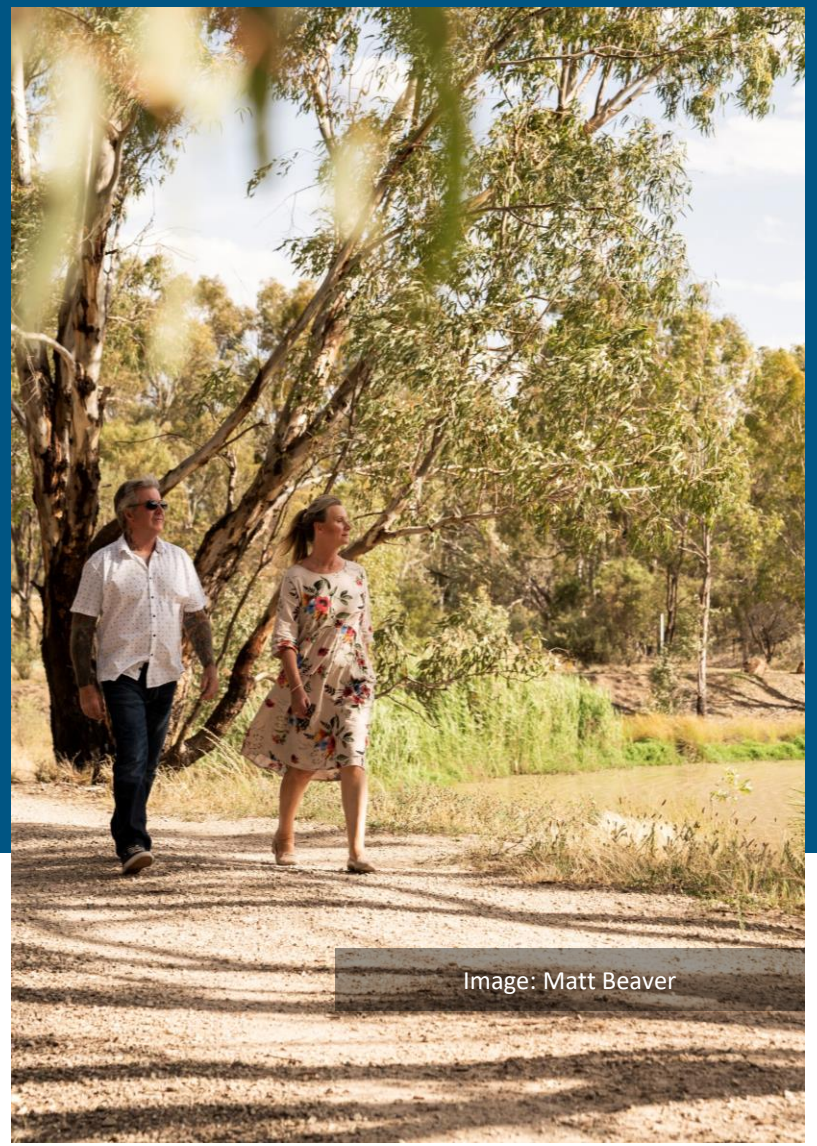


Image: Matt Beaver

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Action Plan Overview

An adaptive approach to decision-making and action as conditions and circumstances change over time.

The Western Riverina Stormwater and Wastewater Management Strategy identifies priority options and a clear pathway to secure water for our communities, now and into the future. For each prioritised option, the action plan outlines:

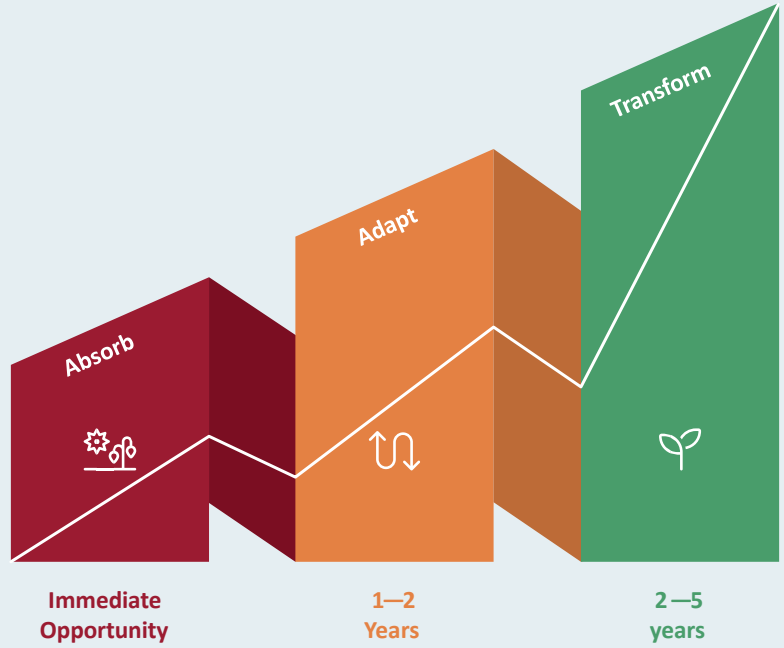
- Details of specific actions required for each option
- The alignment of the action to an implementation pathway

Timeframes are indicative and depend on opportunities, funding, and other variables. They align with the Resilience Theory of Change model introduced in the RDRP, which categorises actions by whether they absorb, adapt, or transform how the region collectively prepares for and strengthens resilience to drought effects. This scale also shows the anticipated level of effort and time required to bring each action to life.

While Council will lead and advocate for the progression of these actions, delivery will often rely on collaboration rather than sole responsibility. Many actions are broader in scale or sit beyond Council's direct operations, requiring funding, resourcing, or partnership with other levels of government and industry.

Action Plans for Prioritised Options

Specific actions were identified for each of the four prioritised options aligned to the resilience theory of change.



Resilience theory of change

Recommissioning the Narrandera Reuse Scheme

Making the most out of the water we already have

This indicative action plan outlines the steps to recommission and expand the Narrandera Recycled Water Reuse Scheme— from early design and engagement through to delivery and ongoing reliability — giving the community confidence in a safe and sustainable supply.

No.	Actions	Timeframe
1.1	**Secure Funding for Treatment Capacity Assessment and New Reuse User Engagement** Obtain funding to undertake preliminary investigations to confirm treatment improvements and network augmentation requirements	Absorb
1.2	**Capacity Assessment and New Reuse Scheme User Engagement** Reach out to potential reuse scheme users identified and understand interest and concerns. This will inform what changes to the reuse scheme network are required. A treatment performance assessment will also confirm what is required to recommission the recycled water supply	Adapt
1.3	**Secure funding and approvals** Obtain government funding and the required necessary approvals to recommission and expand reuse scheme	Adapt
1.4	**Stakeholder engagement and communication** Work with the Narrandera communities, facility managers and NSW EPA to explain benefits, impacts, timing, and measures to protect health and wellbeing of the community. Communication will be ongoing	Adapt - Transform
1.5	**Design of treatment upgrades and network expansion** Determine specifications and design treatment upgrades to improve treatment resilience. Design pipelines and network configuration to supply water to new users	Adapt - Transform
1.6	**Procurement and construction** Tender for contractors and construct treatment upgrades and network expansion	Adapt - Transform
1.7	**Monitoring and future planning (Ongoing)** Track water quality and reliability, to ensure health and wellbeing of community and environment are maintained	Transform

Image: Meg Hollins

Fivebough Wetlands Protection by STP Optimisation

Looking after our natural environment and vulnerable waterways

This indicative action plan outlines the steps to improve the quality of water received by the Fivebough Wetland through optimisation of the Leeton Sewage Treatment Plant ponds. The effluent maturation ponds play an important role to provide disinfection of lingering pathogens – like E coli – but are susceptible to the influence of algae growth which is negatively affecting compliance with EPA discharge requirements.

No.	Actions	Timeframe
1.1	**Secure funding for STP optimisation concept design** Obtain government funding to undertake a water quality sampling study and concept design STP optimisation	Absorb
1.2	**Design of treatment optimisation** Undertake a sampling study to understand what is happening to water quality as it travels through the effluent maturation ponds. Design the augmentations required to optimise treatment performance	Adapt
1.3	**Stakeholder engagement** Engage with relevant stakeholders to notify them of STP changes intended to improve quality of water received by the Fivebough Wetlands	Adapt
1.4	**Secure funding for design finalisation, procurement and construction** Now that changes required are better understood, this step seeks to secure additional funding to carry out changes to optimise the plant treatment process	Adapt - Transform
1.4	**Procurement and construction** Tender for contractors and construct treatment optimisation improvements	Adapt - Transform
1.5	**Monitoring and future planning (Ongoing)** Track water quality and reliability, to ensure health and wellbeing of community and environment are maintained	Transform

Image: Carla Gottgen

Murrami Water Supply

Securing Murrami's water for generations to come

This indicative action plan outlines the steps to secure Murrami's future water supply — from early design and engagement through to delivery and ongoing reliability — giving the community confidence in a safe and sustainable supply.

No.	Actions	Timeframe
2.1	**Confirm scope and design** Undertake a process assessment of the existing Murrami WTP to confirm upgrade requirements and costs. Finalise the pipeline design, ensuring it integrates smoothly with the Leeton system and meets local needs. Update the economic evaluation to confirm the most cost-effective supply option for Murrami	Absorb
2.2	**Stakeholder engagement and communication** Work with the Murrami and Leeton communities to explain benefits, impacts, and timing of the recommended solution	Absorb
2.3	**Secure funding and approvals** Obtain government funding and the required necessary approvals to implement the preferred solution	Adapt
2.4	**Leeton system capacity planning** Assess Leeton's current water capacity and plan upgrades if needed to support both towns	Adapt
2.5	**Procurement and construction** Tender for contractors to build and construct the preferred solution	Transform
2.6	**Monitoring and future planning (Ongoing)** Track water quality and reliability, while planning for population growth and changing climate conditions	Transform

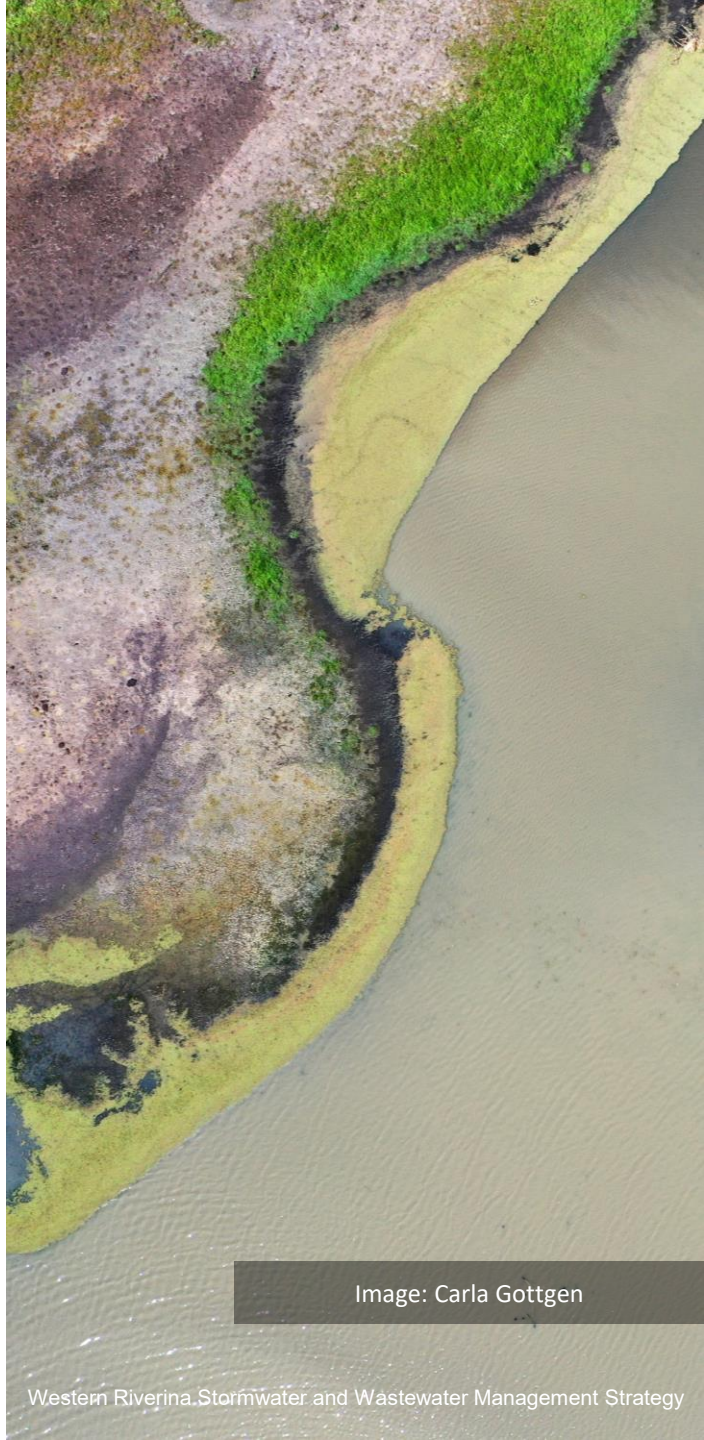


Image: Carla Gottgen

Lake Jerilderie Stormwater Harvesting

Enhancing the Liveability of the Community

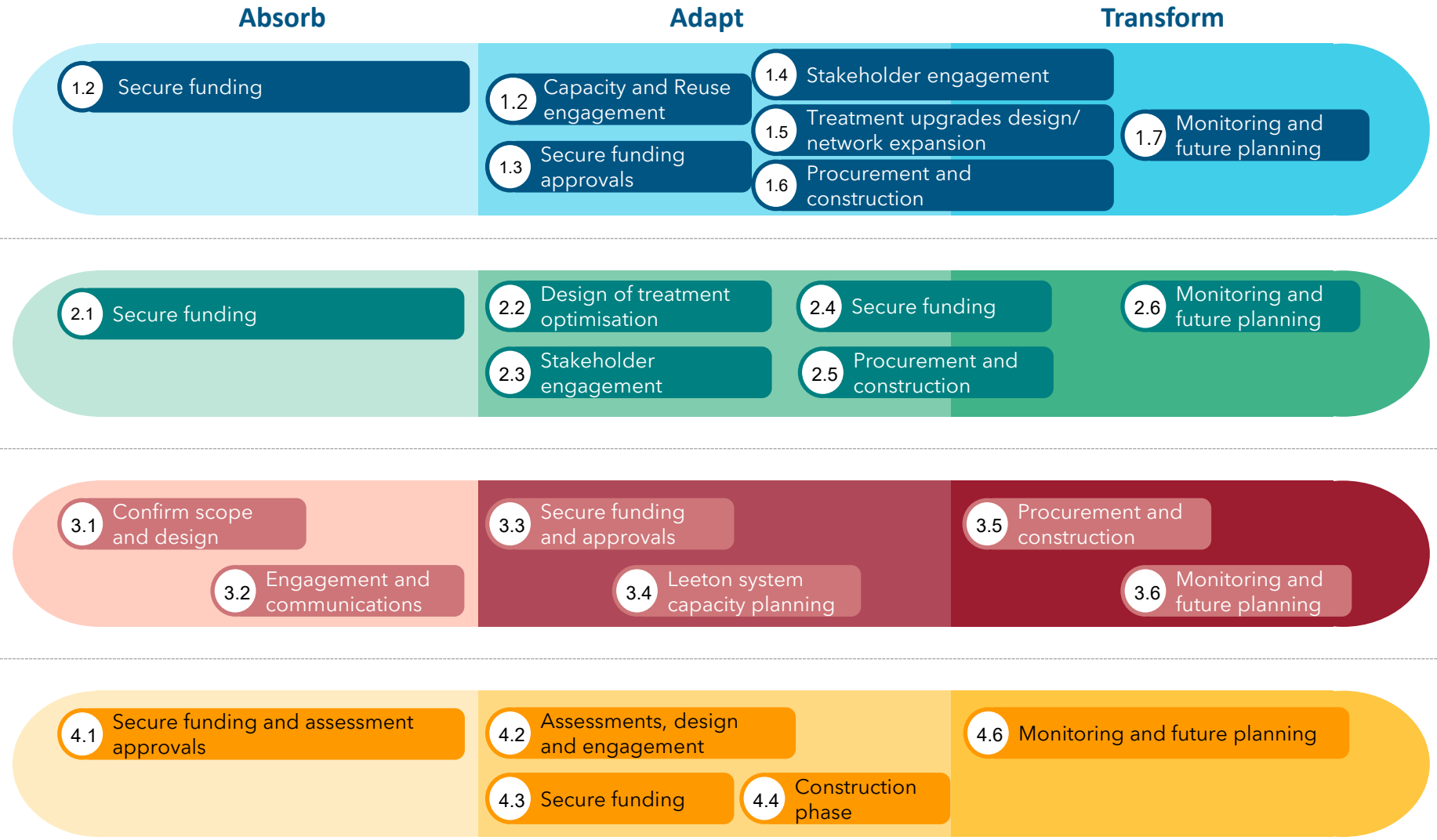
This indicative action plan outlines the steps to harvest stormwater and use it to top up Lake Jerilderie – helping us to reduce reliance on potable water and optimising how we use our water resources and provide community value.

No.	Actions	Timeframe
4.1	**Secure funding and approvals for preliminary assessments** Obtain funding to proceed with initial stages of the stormwater harvesting project	Absorb
4.2	**Preliminary assessments, design and community engagement** Undertake detailed investigation of Lake Jerilderie area to better understand how stormwater can be harvested to replenish Lake Jerilderie and infrastructure required to do so. Engaging with the community and other relevant stakeholders in the process	Adapt
4.3	**Secure funding to construct scheme** Obtain funding to procure and construct designed solution based on preliminary assessment outcomes	Adapt
4.4	**Construction phase** Procure and construct Lake Jerilderie stormwater harvesting scheme	Adapt
4.5	**Ongoing maintenance and monitoring** Ongoing upkeep and performance monitoring to maintain a fit for purpose scheme	Transform

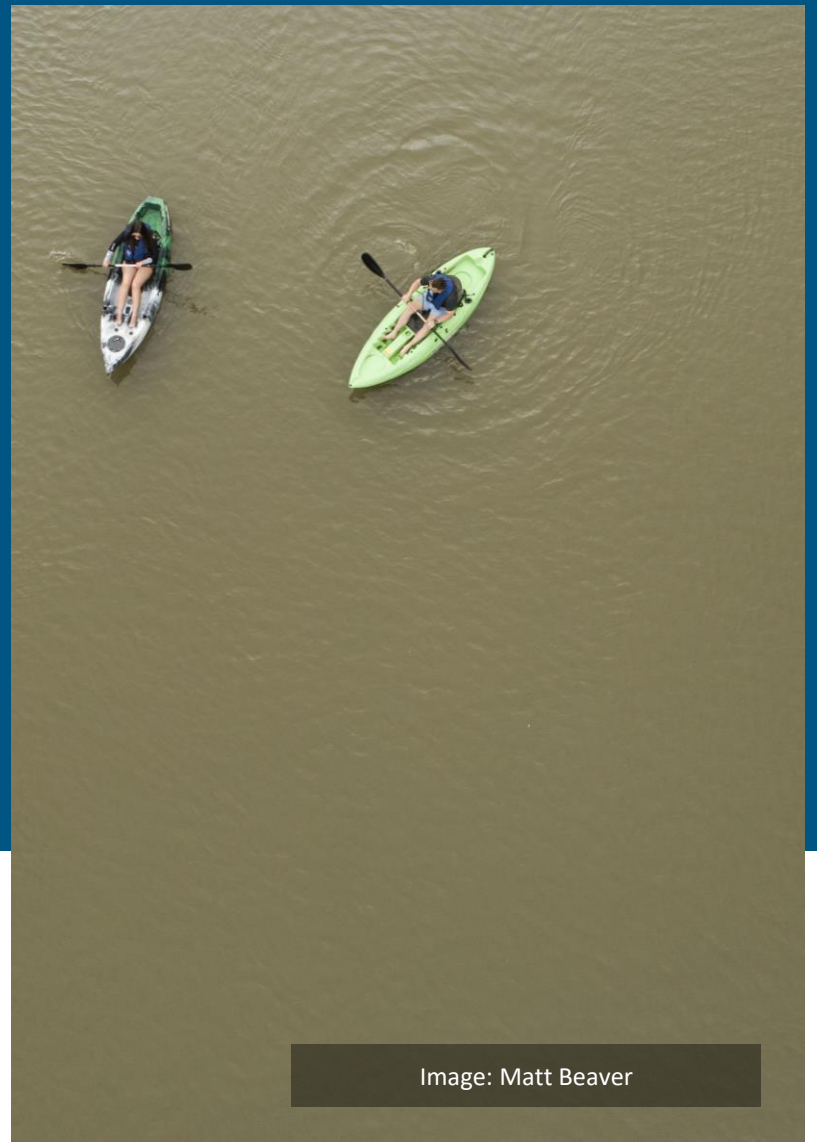
Image: Visit NSW

Our Action Plan to a Sustainable Water Future

The roadmap is indicative and outlines how each project may progress through short, medium and long-term stages to be designed, approved, funded and delivered with lasting community benefit in mind.



05 Appendix



Western Riverina Consortium

Griffith city council ...love the lifestyle...

LEETON SHIRE COUNCIL

Murrumbidgee COUNCIL

Narrandera Shire Council

Glossary

Adaptation	Adjustment or modification in natural and/or human systems in response to actual or expected shocks and stresses to moderate harm, reduce vulnerability and/or exploit beneficial opportunities.
Drought	Drought means acute water shortage. Drought is a prolonged, abnormally dry period when the amount of available water is insufficient to meet our normal use.
Economic Resilience	The ability of the economy to absorb the economic impact of shocks and stresses without changing the economic or community system.
EPA	Environmental Protection Agency
ILM	Investment Logic Map
Intervention Options	Alternative or complementary actions, projects, programs, policies, initiatives, and investments that are planned to bring about change in the system.
LGA	Local Government Area
Local Knowledge	Local knowledge and First Nations knowledge incorporates elements of lived experience within a landscape, bearing witness to the operation of systems. It includes aspects of people, landscape, culture – how people interact with surroundings and as part of communities and processes.
MERI	Monitoring, Evaluation, Reporting, and Improvement
NSW DPE	NSW Department of Planning and Environment
RDRP	Regional Drought Resilience Plan
Resilience	The ability of a system to absorb a disturbance and reorganise to maintain the existing functions, structure, and feedback. Also see general resilience, specified resilience, economic resilience, environmental resilience, and social resilience.
Risk	The potential for adverse consequences for human or ecological systems, recognising the diversity of values and objectives associated with such systems.
STP	Sewage Treatment Plant
Social Resilience	The ability of the human society to cope with a diverse range of shocks and stressors while maintaining existing social and community functions.
Theory of Change	Refers to theories, causal mechanisms and assumptions that explain how key outcomes and impacts will be achieved and how the implementation and production of those outcomes will generate outputs, activities, and outputs.
Trends	Major global or regional influences that are expected to affect the baseline or shape change into the future.
Transform	The process of radically changing or building a new system where the structure, function, feedback, and identity are redefined.
WTP	Water Treatment Plant

Western Riverina Regional Drought Resilience Plan Framework

Monitoring

Vision

As the premier food bowl of Australia, we are driven by a shared desire to provide the primary production that supports Australians to succeed, whatever water uncertainty arises. We sustainably, responsibly, and efficiently utilise our natural endowments of water and landscape applying innovative and sustainable agricultural practices. Our diverse community is built on an attitude of seeking out opportunity, a self-starter initiative and acting together for collective success. We co-operate to enhance our towns and communities, even in the dry times, to leave a sustainable future for the next generation.

Guiding principles

- Self-responsibility and accountability at the core
- Co-operation drives collective success
- Water availability is our lifeblood
- Strength in diversity
- Cohesion creates communities
- Self-responsibility means environmental stewardship

Action pathways

Strategic pathways	Priority Actions
1. Anticipate water availability	Drought Resilience Action Plan
2. Proactively manage business interests	
3. Support off-farm diversification	
4. Grow local co-operative service provision	
5. Support community cohesion	
6. Embed environmental stewardship and sustainable agricultural practices	

Implementation

Evaluationandlearning