

Draft Regional Water Strategy

NSW Murray:
Shortlisted Actions – Executive Summary

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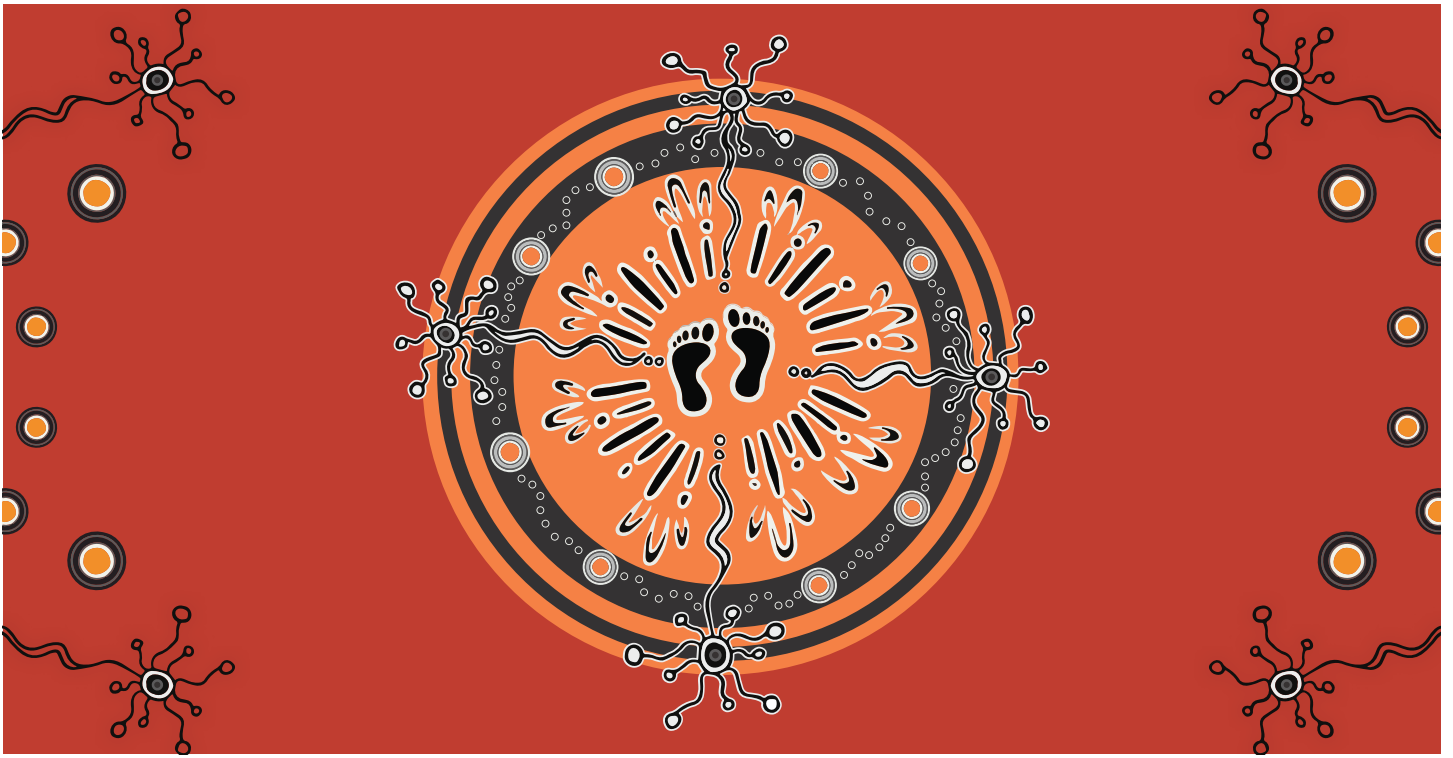
Cover image courtesy of iStock. Murray River, Moama.

More information water.dpie.nsw.gov.au/plans-and-programs/regional-water-strategies

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Acknowledging First Nations people

The NSW Government acknowledges First Nations people as the first Australian people and the traditional owners and custodians of the country's lands and water. First Nations people have lived in NSW for over 60,000 years and have formed significant spiritual, cultural, and economic connections with its lands and waters.

Today, they practice the oldest living culture on earth.

The NSW Government acknowledges the Bangerang, Barapa Barapa, Barkandji, Bidhawal, Maljangapa, Maraura, Mutthi Mutthi, Ngarigu, Ngiyampaa, Nyeri Nyeri, Tati Tati, Walgalu, Wadi Wadi, Wemba Wemba, Weki Weki, Wiradjuri and Yorta Yorta people as having an intrinsic connection with the lands and waters of the NSW Murray Regional Water Strategy area. The landscape and its waters provide the First Nations people with essential links to their history and help them maintain and practice their traditional culture and lifestyle.

We recognise the Traditional Owners as the first managers of Country. Incorporating their culture and knowledge into management of water in the region is a significant step towards closing the gap.

Under this regional water strategy, we seek to establish meaningful and collaborative relationships with First Nations people. We will seek to shift our focus to a Country-centred approach; respecting, recognising and empowering cultural and traditional Aboriginal knowledge in water management processes at a strategic level.

We show our respect for Elders past and present through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places where First Nations people are included socially, culturally and economically.

As we refine and implement the regional water strategy, we commit to helping support the health and wellbeing of waterways and Country by valuing, respecting and being guided by First Nations people, who know that if we care for Country, it will care for us.

We acknowledge that further work is required under this regional water strategy to inform how we care for Country and ensure First Nations people hold a strong voice in shaping the future for all communities.

Artwork by Nikita Ridgeway.

The NSW Government is committed to the NSW Murray region having healthy, reliable and resilient water resources, so it remains a place where people want to live, work and visit, both now and for future generations. This means that we need to make the best use of existing water resources and prepare for future uncertainty presented by a more variable and changing climate.

The NSW Murray region

The NSW Murray region is in southern NSW and includes stunning natural landscapes that change from mountainous terrain in the east to flat alluvial plains in the west. The region is home to many thriving regional centres and communities, productive agricultural land and nationally important wetlands, including 2 that are Ramsar listed.

The region is located within the traditional lands of the Bangerang, Baranpa Barapa, Barkandji, Bidhawal, Maljangapa, Maraura, Mutthi Mutthi, Ngarigo, Ngiyampaa, Nyeri Nyeri, Tati Tati, Wadi Wadi, Walgau, Wemba Wemba, Weki Weki, Wiradjuri, Yorta Yorta Nations. These Nations have been caretakers of the NSW Murray region for over 60,000 years.

The region is part of the broader southern connected Basin, linked hydrologically and through water management arrangements to the Darling and Murrumbidgee rivers and by extension to Victoria, Queensland and South Australia. The region also receives inflows from the Snowy Scheme under the Snowy Water Licence; for this reason, the Snowy River catchment is included in the NSW Murray Regional Water Strategy.

Water is a significant feature of the NSW Murray region's landscape and environment. The Snowy and Murray river systems, floodplains, swamps, aquifers, glacial lakes and wetlands provide habitat for many aquatic species, including birds and native fish. The region's waterways are home to several threatened or endangered species, and the alluvial sediments of the Murray River support groundwater dependent ecosystems. Environmental assets also play a crucial role in the region's liveability and provide recreational and tourism opportunities.

The NSW Murray region has access to surface water and varying quality groundwater for towns, recreational uses, cultural and environmental needs, and industry. Management of water within the region is complex, with inter-jurisdictional agreements such as the Murray–Darling Basin Agreement and implementation of the Murray–Darling Basin Plan.

Extreme weather events are not uncommon in the NSW Murray region. Severe and prolonged droughts are frequently followed by extensive rainfall events that can lead to flooding. Over the last few years, there has been extended and large-scale flooding across the catchment. These extreme events pose challenges for the region, its water resources and all water users.

Like other regions across Australia, the NSW Murray region will likely face a more variable and changing climate in the future. Preparations need to be made now for a scenario in which there is a more variable climate and potentially less water available. The implementation of policy reforms, such as the Murray–Darling Basin Plan (Basin Plan), also have the potential to reduce water availability for consumptive uses. Actions need to be put in place that will enable water managers to make smarter decisions about water use, supported by better knowledge and information.

The NSW Murray Regional Water Strategy will provide a long-term strategic plan to prepare towns, communities, industries and the environment for a future changing climate with reduced water security, whilst recognising the impacts that intergovernmental legislative and policy positions might have upon them. The strategy will include actions, tools and solutions to better use, share, store and deliver water in the NSW Murray region – helping towns and industries to ride the highs and lows of water availability, and improving the condition of waterways, catchments and other vital environmental assets. Managing water resources efficiently and sustainably into the future will help keep the NSW Murray region an attractive place to live, work and visit.

As water resources continue to come under pressure from a variable climate, and land use and population changes, as well as government policies and programs, the NSW Murray Regional Water Strategy must remain adaptable to meet the future needs of all water users and the environment, and harness future opportunities across the region.

Figure 1. Map of the NSW Murray region

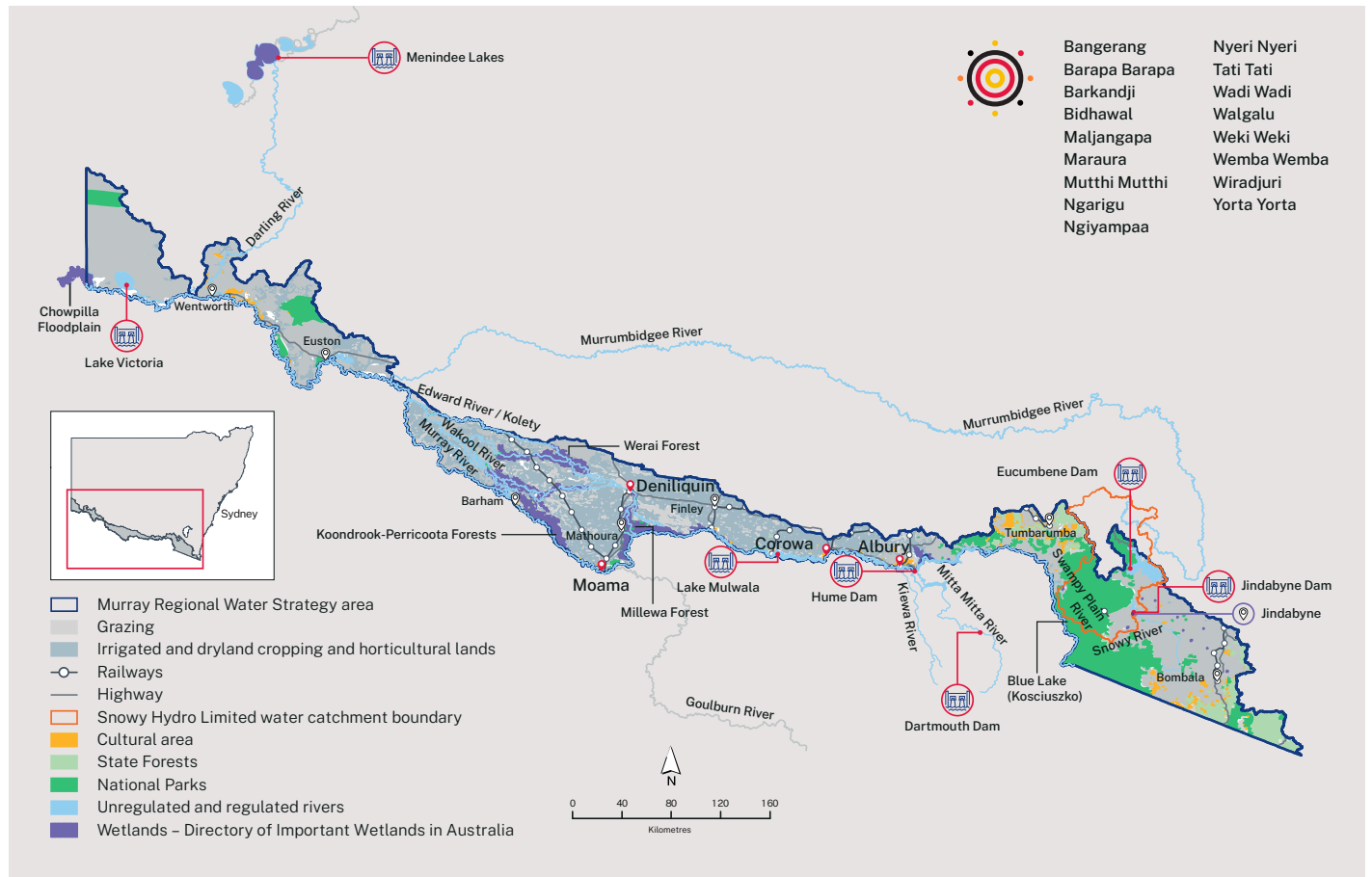


Image courtesy of Destination NSW. Kosciuszko National Park, NSW.

What is the purpose of the consultation paper?

The NSW Government is developing 13 regional water strategies that bring together the best and latest climate evidence with a wide range of tools and solutions to plan and manage each region's water needs over the next 20 to 40 years.

The purpose of this consultation paper is to guide community and stakeholder engagement on the challenges, priorities and actions proposed for inclusion in the final NSW Murray Regional Water Strategy. The consultation paper is supported by a range of documents that provide evidence of the technical and scientific analyses, processes and context for the proposed challenges, priorities and actions in the draft strategy.

These supporting documents are:

- Climate and hydrological modelling report
- Options modelling report
- Economic base case report
- Economic detail assessment.

No decisions have been made about the final strategy. We are seeking your views on the shortlist of proposed actions set out in this consultation paper through a public exhibition period that runs from 22 May to 14 July 2024.

To support the public exhibition, a range of consultation activities will take place. These activities include webinars, targeted and public information sessions, bilateral discussions, and online community engagement. For further information or to register to attend a session, visit dpie.nsw.gov.au/murray-regional-water-strategy

The draft NSW Murray Regional Water Strategy is backed by new climate datasets that have been developed specifically for the regional water strategies program. These datasets provide a more comprehensive understanding of climate variability in the NSW Murray region beyond the recorded historical data. This means we can better assess the full range of risks to the region's water system and build our understanding of how different options might work under a range of future climate conditions.

Our climate science is continuously improving and the modelling used to develop the draft NSW Murray Regional Water Strategy is an important first step to better understand the region's climate and the potential vulnerability of towns, communities, industries and the environment to a more variable and changing climate. Work is progressing to further enhance understanding of the region's climate and how it could affect vital water resources, including groundwater.



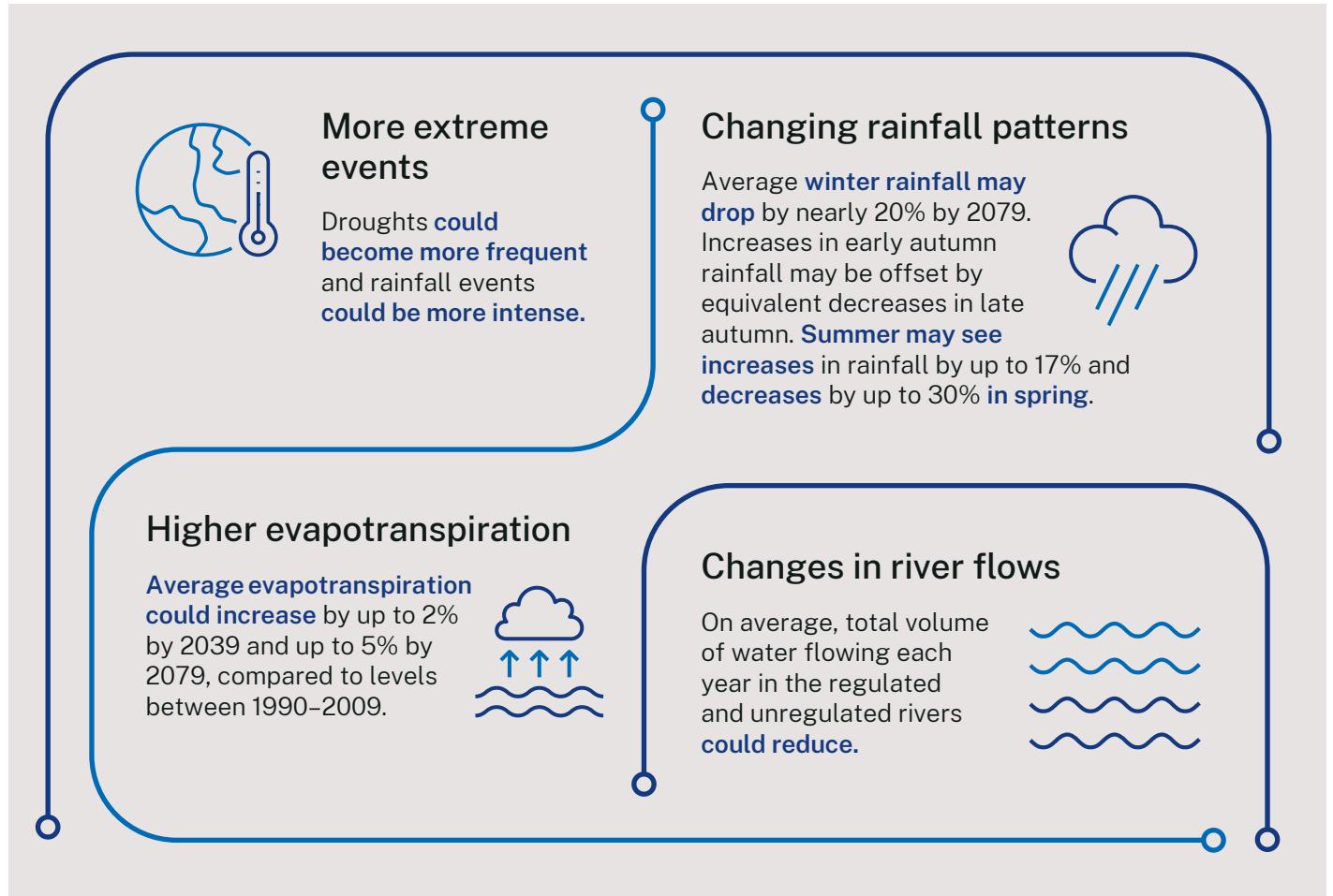
Image courtesy of Destination NSW. Edward River, Deniliquin, NSW.

What the future climate could be in the NSW Murray region

The future climate in the NSW Murray region is uncertain. It may be similar to what was experienced in the past or it may be more variable. Analysis of different climate scenarios indicates that there could be more extreme events, hotter and longer droughts, higher evaporation rates and more unpredictable rainfall events and variable river flows.

We need to plan for these uncertainties and continue to refine our understanding of the water-related risks in the NSW Murray region to ensure people, the environment and industries can live and thrive in the future.

Figure 2. What the future climate could be in the NSW Murray region



Where should we focus first?

The Draft NSW Murray Regional Water Strategy identified a range of current and future water-related challenges and opportunities.¹ Following feedback from public consultation and further technical analysis, 4 key challenges have been identified as immediate priorities for the region. Other water-related challenges described in the Draft NSW Murray Regional Water Strategy are also important and can be revisited in future reviews of the strategy.



Balancing competing interests for water

In the NSW Murray region, there are many, often competing, interests for water including town water supply, the environment, electricity generation, irrigated agriculture and cultural needs. Balancing the interests of water users and improving how water is shared and managed within complex and inter-related governance and institutional arrangements is a challenge that is often complicated and requires collaborative and inclusive approaches.

Groundwater and surface water resources are fully allocated in the NSW Murray region and total water use is limited by sustainable diversion limits (SDLs).² The Murray–Darling Basin Plan 2012, through water resource plans, limits the amounts of water that can be taken from rivers and aquifers for towns, industries and other uses that are not licensed.

Supporting sustainable use of water in the region will be challenging within a system where groundwater and surface water are fully allocated and where water use to meet current and future demands is constrained by extraction limits. Further pressure on these resources will occur due to growing regional centres, changes in land uses and the growing and changing demand for water by existing and new industries.

Over the next 20 to 40 years, significant population growth is expected in Albury and regional towns serviced by Murray River Council. There is already uncertainty about water security for these towns and communities and, under a dry future climate scenario, there may be a risk of future supply shortfalls.

Balancing competing interests for water is made even more difficult by delivery constraints and changes in pattern of water use. In addition the delivery of consumptive and environmental water to the lower NSW Murray region is also impacted by the long distance from storages to end users, channel constraints and the need to minimise inundation of low-lying lands, especially during periods of peak demand.

An increase in water use in the lower Murray means getting water to where it is needed is often difficult and there is the potential for future supply shortfalls.

Changes in land use are also impacting water quality, with discharges from intensive agricultural farming and processing operations and poor catchment health collectively reducing the quality of raw water supplies. This creates significant challenges for supplying clean water to towns.



Improving the health and resilience of ecosystems

Water infrastructure, river regulation and water extraction have influenced flow variability, temperature, water quality and the distribution of water throughout the region. Despite extensive water reform initiatives³ to improve water for the environment, altered flow regimes continue to affect ecosystems in the NSW Murray region. In turn, this has affected communities of vegetation, waterbirds, fish and other aquatic animals (such as platypus and turtles), including some threatened species.

Parts of the upper NSW Murray River and Snowy River catchments are in poor or very poor condition, due to historical and current land and water management resulting in altered stream flows, increased rates of sedimentation, weed infestations, declining fish populations and loss of aquatic and riparian habitats.

Under a dry climate future, there could be further significant decreases in flows compared to those seen under the historical climate. This could magnify the negative impacts on riverine and floodplain ecosystems and aquatic species, as well as constraining efforts to restore the health of key environmental assets along the Murray system.

Sustaining and improving the health and resilience of aquatic and floodplain ecosystems across all climate scenarios will require more effective water management and use during wet, moderate and dry periods.

1. The draft NSW Murray Regional Water Strategy is available at: dpie.nsw.gov.au/water/our-work/plans-and-strategies/regional-water-strategies/public-exhibition/murray/murray-regional-water-strategy
2. More information about Sustainable Diversion Limits is available at: www.mdba.gov.au/water-use/water-limits/sustainable-diversion-limits
3. Initiatives established through the Murray–Darling Basin Plan, i.e. Commonwealth water buybacks and SDLAM projects, since 2004 and programs such as Reconnecting River Country Program and the Snowy Water Licence Review.



Addressing barriers to Aboriginal people's water rights

Water is an essential part of Aboriginal people's culture and heritage, but the current water management framework is not meeting the needs and aspirations of Aboriginal people. There is limited understanding and acknowledgement of the spiritual connection Aboriginal people have to healthy waterways and important cultural sites.

A restrictive licensing framework, complex and confusing water management arrangements, a lack of water ownership and poor access to waterways and culturally important sites constrain Aboriginal people from advancing their economic and social needs and from fulfilling their cultural obligation to care for Country. In the NSW Murray region, a number of cultural sites are on floodplains where development such as levees has altered the passage of flows and led to some cultural assets being disconnected from main waterways.

Involving Aboriginal people more closely in decision-making processes around water management could enrich and improve our water management decisions and in turn provide employment and economic advancement opportunities for Aboriginal people, including youth.

We need to support access to water, improve our engagement with Aboriginal people, and secure flows for water dependent cultural sites so we can all benefit from traditional knowledge in managing our water resources.



Supporting existing and emerging industries and livelihoods

Agriculture, agribusiness and hydro-electricity are the major water-reliant industries in the NSW Murray region. Water resources also support tourism and manufacturing. A key challenge for the region is to support existing industries and attract new, high-value industries within the context of a variable and changing climate and fully committed water resources.

The NSW Murray region forms part of Australia's 'food bowl', with a reputation as one of Australia's premium agricultural areas. The level of economic activity in the region is closely related to water availability. Many farm businesses have adapted to the region's variable

climate and water availability by producing annual or seasonal crops and investing in technology and improved management practices. However, changes within and between industries, including the growth of permanent plantings in the region's west, are altering the geographical use of water in the catchment, water trade patterns and seasonal water demand.

A changing climate has the potential to constrain industry and economic growth across the region. Severe droughts and increased flooding could place great pressure on the resilience of the broader regional economy. Potential reduced water availability may increase uncertainty for industries, force changes to the type of crops that are suitable for the region and lead to adverse economic and social impacts. While there is also significant potential for future development in high value industries, a shortage of reliable water supplies may hinder this growth.

Devising solutions to meet this challenge is constrained by gaps in understanding of the region's groundwater resources. During drought, reliance on groundwater can increase to support the region's industries and communities, but more needs to be known about the risks to groundwater systems under different climate projections and population growth scenarios to provide this support sustainably.

There are particular risks for water users downstream of the Barmah Choke, where the declining capacity of the Choke means that there are challenges in delivering water when it is needed downstream. This increases the risk of periods when demand outstrips supply, and also results in a range of environmental and cultural impacts around the Barmah Choke due to unseasonal inundation of wetlands and channel erosion.

There are also risks that further recovery of water for the environment by the Australian Government to meet targets in the Basin Plan will have a particular impact on the agricultural sector and communities in the southern part of the Basin.

The NSW Government recognises these potential risks and is working with communities and other governments to minimise them.

Addressing the challenges

The NSW Murray Regional Water Strategy is an adaptable long-term strategic plan that is developed so that communities, the environment and industries can be better prepared for a future changing climate. While we may have to make some difficult choices, there are opportunities to advance the needs and aspiration of Aboriginal people in the NSW Murray region; enhance town water security; support the resilience of industries; restore river, wetland and floodplain habitats; and support alternative water supplies that do not add further pressures to finite water resources.

The draft NSW Murray Regional Water Strategy identifies 3 priorities to meet the challenges for the region. Each priority is supported by a suite of proposed actions. These priorities and proposed actions aim to improve the NSW Murray region's readiness to adapt to a more variable climate and support the difficult decisions needed to deliver healthy, reliable and resilient water resources for the region's future.



Priority 1: Continue to improve water management

Effective water resource management in the NSW Murray region requires a holistic and integrated evidence-based approach, involving the cooperation of various stakeholders, government bodies and the community. Regular reviews and the flexibility to adjust management strategies to respond to evolving conditions are essential for long-term sustainability.

Continual improvement in management of water resources is required in the region to maintain ecosystem health, support agriculture and other industries, preserve cultural values and safeguard the wellbeing of communities that rely on the river.

Proposed actions under this priority focus on:

- continuing to incorporate best available evidence and climate data into the water management framework
- improving the way water and land planning processes are integrated
- fostering collaboration with Aboriginal groups.

Priority 2: Improve river and catchment health

Improving river and catchment health brings a range of benefits. It enhances water availability by promoting groundwater recharge, attenuating floods and maintaining base stream flows, promotes good water quality and supports biodiversity, cultural values and recreational opportunities.

To improve catchment health, management systems and decision-making processes need to use a holistic, whole-of-catchment approach.

Proposed actions under this priority focus on:

- coordinating efforts across stakeholder groups and supporting landholders to build awareness and capacity for best practice natural resource management and sustainable agriculture
- improving water resource health through better land management that considers Aboriginal knowledge and culture, to benefit users at a local, whole-of-catchment and regional scale
- improving the way water for the environment is managed and delivered
- limiting or removing pressures and impacts directly related to water infrastructure, particularly on native fish.

Priority 3: Support sustainable economies and communities

Regional cities and towns in the NSW Murray region could face increasing risks to the security of their water supplies over the coming decades. Agriculture, energy generation and tourism will continue to be important to the region's economy into the future. It is vital to understand the risks and challenges to our industries and communities to better manage water supply. It is also important that operational, planning and development decisions take into account the likely reliability and security of future water supplies.

The actions shortlisted under this priority will support improved industry and community resilience to climate-related and other challenges, with a focus on:

- improving public access to the new climate datasets and water availability forecasts
- investigating innovative ways to improve run-off in the key source catchments of the Snowy Mountains
- supporting towns to better prepare to meet the water needs of a growing population
- supporting water-related employment and economic opportunities for Aboriginal people, as well as progressing cultural access licence improvements.

These proposed actions support the priorities and actions of the NSW Water Strategy,⁴ align with the state-wide Aboriginal Water Strategy and reflect NSW's ongoing commitments under the Murray–Darling Basin Plan.

4. The NSW Water Strategy can be viewed at: www.dpie.nsw.gov.au/water/plans-and-programs/nsw-water-strategy

Proposed shortlisted actions to support these priorities are summarised below. We want your views on whether these actions are the best way to prepare the region for the future. We also want your feedback on which actions should be prioritised for implementation over the next 3 to 5 years and which ones should be implemented in the medium and longer term. Information about how to have your say is in section 5 of the consultation paper.

When will the actions be implemented?

A critical feature of the final NSW Murray Regional Water Strategy is to clearly identify what actions and investments are needed now and those that will or may be needed further into the future. The strategy considers a 20-year timeframe to chart a progressive journey that meets existing challenges, identifies and prepares for foreseeable coming challenges and lays the groundwork for adapting to future uncertainties and changed circumstances.

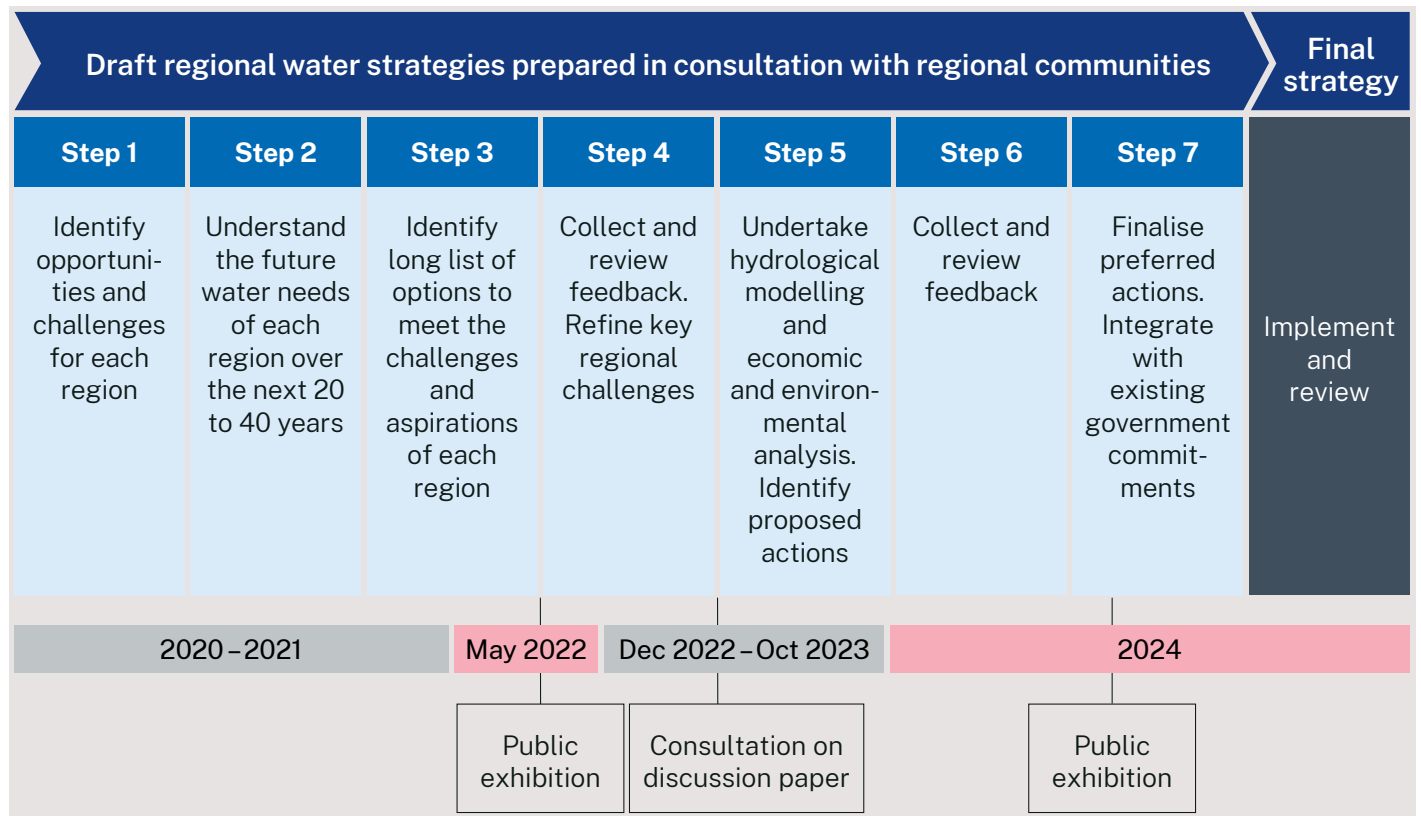
Following public consultation, an implementation plan will be developed that will set out when each action will commence and what will be achieved by when. The implementation plan will also identify key partners for delivering these actions, including local councils, government agencies, local community and industry groups, environmental managers and local Aboriginal communities.

Not all proposed actions will be commenced at once, and funding will be a key consideration in planning when and how the actions will be implemented. The regional water strategies will be a key tool in seeking funding as future opportunities arise.



Image courtesy of Destination NSW. Township, Albury.

Figure 3. NSW Murray Regional Water Strategy delivery timeline



How to have your say

Your voice is important. The NSW Murray Regional Water Strategy: Shortlisted Actions – Consultation Paper is on public exhibition from 22 May to 14 July 2024. Supporting information is available at dpie.nsw.gov.au/murray-regional-water-strategy

You can also have your say by providing written feedback to the NSW Department of Climate Change, Energy, the Environment and Water via:

Web: dpie.nsw.gov.au/water/our-work/plans-and-strategies/regional-water-strategies/public-exhibition/murray

Email: regionalwater.strategies@dpie.nsw.gov.au

Specific feedback is requested on:

- whether any of the actions in this consultation paper should not be shortlisted and why
- how the proposed actions should be staged and which actions should be implemented first

Please note that all submissions will be published on the NSW Department of Climate Change, Energy, the Environment and Water’s website, unless you let us know in your submission that you do not wish the content to be released.

To support community engagement on this consultation paper, consultation sessions will be held to give participants additional context and a more thorough understanding of proposed priorities and actions. Details of these sessions can be found at the website listed above.

Attachment A: NSW Murray Regional Water Strategy – shortlist of proposed actions

Figure 4. Proposed water security challenges and priorities for the NSW Murray region

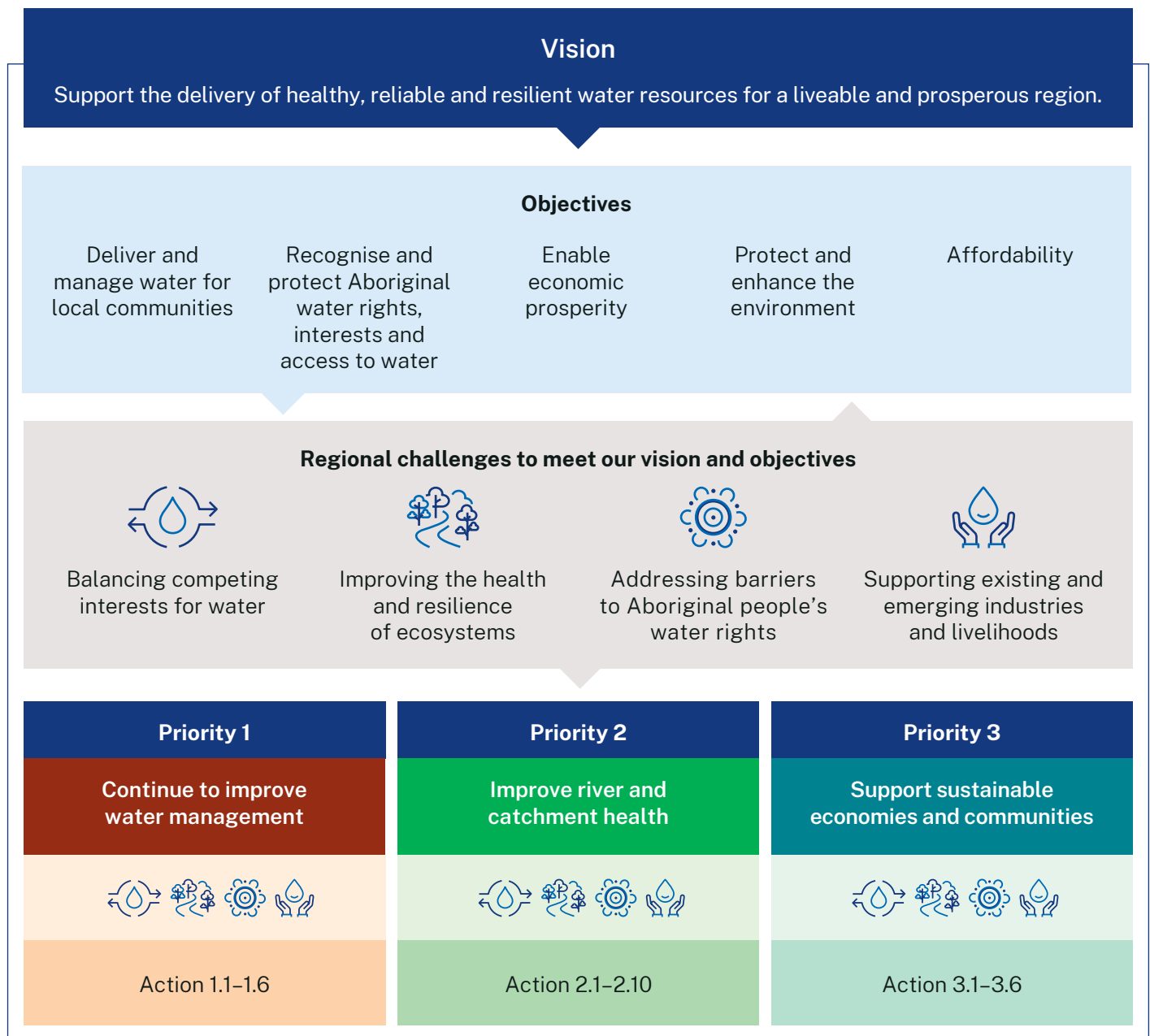
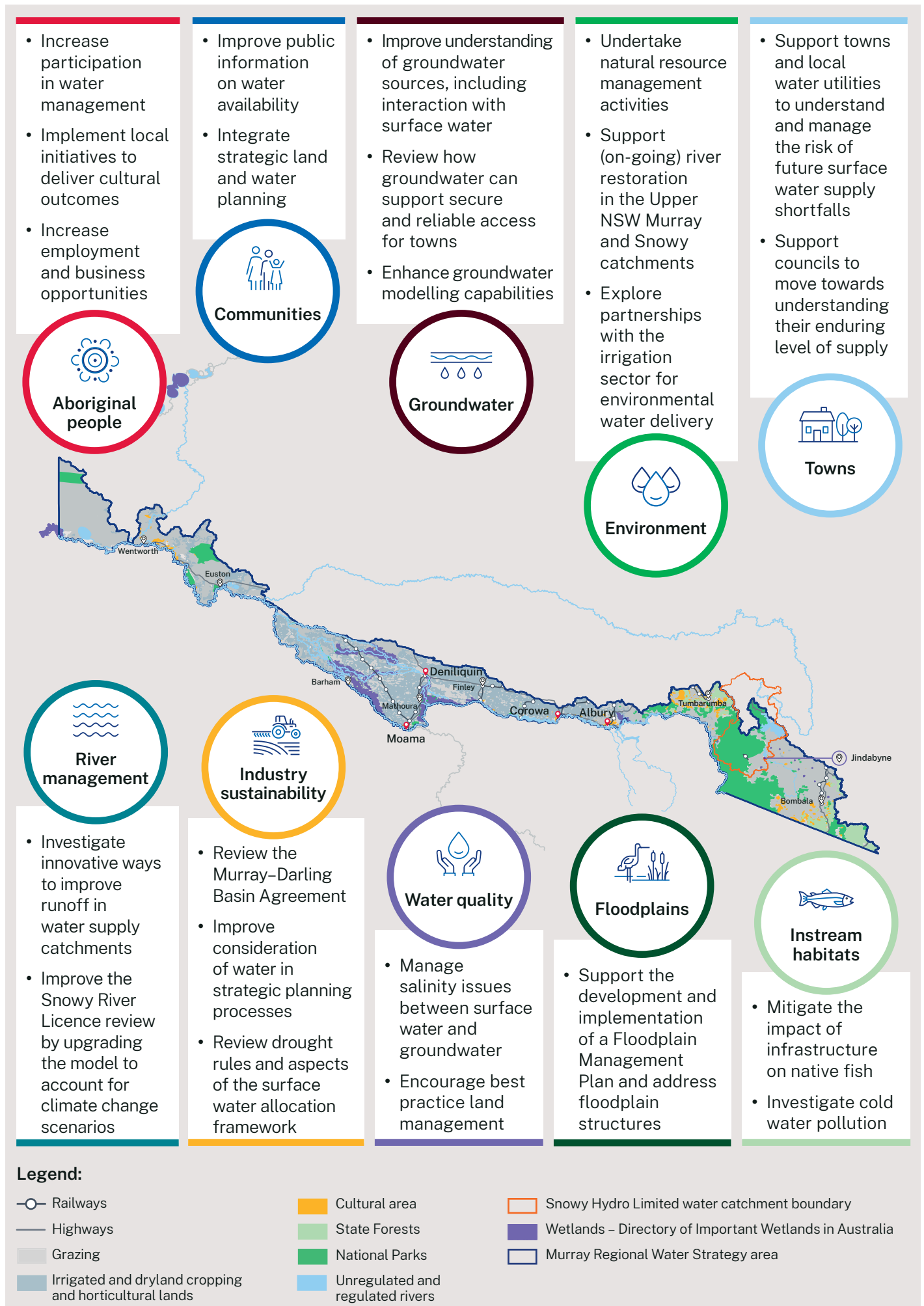


Figure 5. NSW Murray Regional Water Strategy – location of shortlisted actions



Priority 1

Continue to improve water management

Legend



Balancing competing interests for water



Improving the health and resilience of ecosystems



Addressing barriers to Aboriginal people's water rights



Supporting existing and emerging industries and livelihoods

Proposed action	Summary	Challenges addressed
<p>Action 1.1 Improve understanding and management of groundwater sources</p>	<p>Improve water management by:</p> <ul style="list-style-type: none"> • better understanding the water requirements of and potential risks to groundwater-dependent ecosystems • updating the approach to reviewing extraction limits • preparing a framework to act on declining groundwater levels • developing a regional water quality monitoring program. 	
<p>Action 1.2 Improve strategic water management and decision-making frameworks by incorporating new climate and modelled data</p>	<p>The water sharing plans covering the NSW Murray region are due for renewal in 2024, 2026 and 2030. This provides an opportunity for new climate data to be considered in the reviews of these plans. This will allow a review of the drought rules, further investigate conversion of small portions of general security entitlements to high security and aspects of the surface water allocation and trading framework, as well as testing the adequacy of current flood operation rules.</p>	
<p>Action 1.3 Build climate evidence base for the next Snowy Water Licence Review</p>	<p>A detailed review of this licence will commence in 2027. This provides the opportunity to include varying climate change scenarios into an agreed inter-jurisdictional model package that could be the main source for testing changes to the Snowy Water Licence, water management policy and operational rules relating to the Snowy Hydro system.</p>	
<p>Action 1.4 Foster ongoing arrangements for participation of local Aboriginal people in water management</p>	<p>Support the Regional Aboriginal Water Committee in the NSW Murray region to ensure continued involvement in water management activities and decision making.</p>	

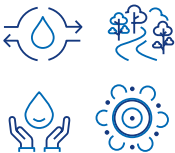

Proposed action	Summary	Challenges addressed
<p>Action 1.5 Improve consideration of water in strategic planning processes</p>	<p>Work across government to better integrate future strategic land use and water planning so that water resources can be considered upfront in future land use planning processes.</p> <p>This action would also consider projected population and industry growth trends and identify water-related gaps in the current land use planning framework in the NSW Murray region.</p>	
<p>Action 1.6 Review the Murray–Darling Basin Agreement</p>	<p>Under this action, NSW would advocate for the Agreement to be reviewed and updated so that it can be aligned with an updated understanding of a changing and more variable climate.</p>	



Image courtesy of Murray Vanderveer. Old Mountain Road, NSW.

Priority 2

Improve river and catchment health

Legend



Balancing competing interests for water



Improving the health and resilience of ecosystems



Addressing barriers to Aboriginal people's water rights



Supporting existing and emerging industries and livelihoods

Proposed action	Summary	Challenges addressed
<p>Action 2.1 Rehabilitate ecologically and culturally important sites within the mid and lower catchment</p>	<p>This action aims to improve habitat for native plants and animals, and improve water quality, river health and ecosystem resilience in the regulated river areas of the NSW Murray region.</p>	
<p>Action 2.2 Encourage partnerships with the irrigation sector for environmental water delivery to public and private lands</p>	<p>Governments, irrigation infrastructure operators, Aboriginal people and landholders working together through voluntary partnerships to deliver water for the environment to reach ecosystems on public and private lands.</p>	
<p>Action 2.3 Mitigate the impact of infrastructure on native fish</p>	<p>Progress work to install fish passages at priority sites and build on existing government commitments to encourage and provide incentives for the installation of diversion screens at priority sites. This action would also restore and restock degraded native fish habitats and explore solutions to address cold water pollution.</p>	
<p>Action 2.4 Support development and implementation of a Murray Floodplain Management Plan and address floodplain structures</p>	<p>Support the development of a valley-wide, connected floodplain management plan and address floodplain works and structures that adversely impact the environment and Aboriginal cultural assets and values.</p>	
<p>Action 2.5 Continue to invest in modelling to improve groundwater knowledge in the NSW Murray region</p>	<p>Continue to improve groundwater system models that underpin water management planning in the NSW Murray region. This would include developing multi-disciplinary models that incorporate socio-economic, physical and groundwater data.</p>	




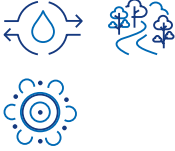

Proposed action	Summary	Challenges addressed
<p>Action 2.6 Encourage best practice land management</p>	<p>Support private landholders to adopt best practice land management in priority waterways by offering resources, tools and advisory services in grazing, farming, erosion control, biodiversity and habitat restoration. This action would, align with other catchment improvement initiatives, focusing on catchments where river reaches have a high recovery potential or improvements are critical to achieving catchment health objectives.</p>	
<p>Action 2.7 Support place-based initiatives to deliver cultural outcomes for Aboriginal people</p>	<p>Support Aboriginal organisations and communities to develop tailored projects for their communities. This action would aim to move away from centralised decision-making and develop a flexible program that can be adapted and is driven by the principle of self-determination. It would include a demonstration river reach, programs to engage Aboriginal youth in water and landscape management, and improved access to sites of cultural significance.</p>	
<p>Action 2.8 Implement the Reconnecting River Country Program in the NSW Murray region</p>	<p>Removal of constraints to enable the flexible use of water for the environment to increase the frequency and extent rivers connect to their wetlands and floodplains.</p>	
<p>Action 2.9 Support (ongoing) river restoration in the upper NSW Murray and Snowy catchments</p>	<p>Develop and fund a collaborative and coordinated Snowy and upper NSW Murray River catchment recovery program that integrates a range of river recovery actions. This would build on and enhance existing programs, as well as exploring improvements in environmental water management through the review of the Snowy Water Inquiry Outcomes Implementation Deed.</p>	
<p>Action 2.10 Investigate improvements to the flow regime of the Snowy and montane rivers</p>	<p>This action would investigate a range of opportunities to restore a sustainable flow regime, with partner governments and stakeholders in the Snowy and montane rivers.</p>	



Image courtesy of iStock. Murray River, NSW.

Priority 3

Support sustainable economies and communities

Legend



Balancing competing interests for water



Improving the health and resilience of ecosystems





Addressing barriers to Aboriginal people's water rights



Supporting existing and emerging industries and livelihoods

Proposed action	Summary	Challenges addressed
<p>Action 3.1 Support the development of new water related Aboriginal business opportunities in the NSW Murray region</p>	<p>Support Aboriginal business development opportunities in the NSW Murray region, some of which may require access to water resources.</p> <p>This action would also investigate ways to expand water-related employment opportunities for Aboriginal people in the NSW Murray region.</p>	
<p>Action 3.2 Reduce uncertainty in groundwater security for regional towns and industry</p>	<p>This action focuses on enhancing groundwater security in the NSW Murray region, which is crucial for towns and industries. It addresses varying quality and availability issues, especially during droughts. Strategies include monitoring contaminants, developing innovative salinity solutions filtration tech, and collaborating with councils to promote for sustainable groundwater use and develop a policy for managed aquifer recharge.</p>	
<p>Action 3.3 Investigate innovative ways to improve runoff in water supply catchments</p>	<p>This action explores expansion of cloud seeding activities for increased snowfall and investigates strengthening bushfire management to preserve crucial runoff processes and water quality.</p>	
<p>Action 3.4 Support towns and local water utilities to understand and manage their future water security risks</p>	<p>Supports towns and local water utilities to manage future water security risks. This action involves risk analysis, upgrading water models, exploring alternative supply options, and promoting urban efficiency measures, including stormwater harvesting and smart metering. Various programs and collaborations would aim to enhance water system efficiency and conservation.</p>	

Proposed action	Summary	Challenges addressed
<p>Action 3.5 Consider an enduring level of supply to support regional towns and centres</p>	<p>Shift away from managing water security based on acceptable risk towards ensuring an enduring level of supply for regional towns. This action involves developing guidance for local water utilities to adopt this approach, considering factors such as community needs and willingness to endure water restrictions.</p>	
<p>Action 3.6 Improve public access to climate information and water availability forecasts</p>	<p>Improve existing platforms and products to provide information about water availability and climate change in a format tailored for water users and their business planning needs in the NSW Murray region.</p>	

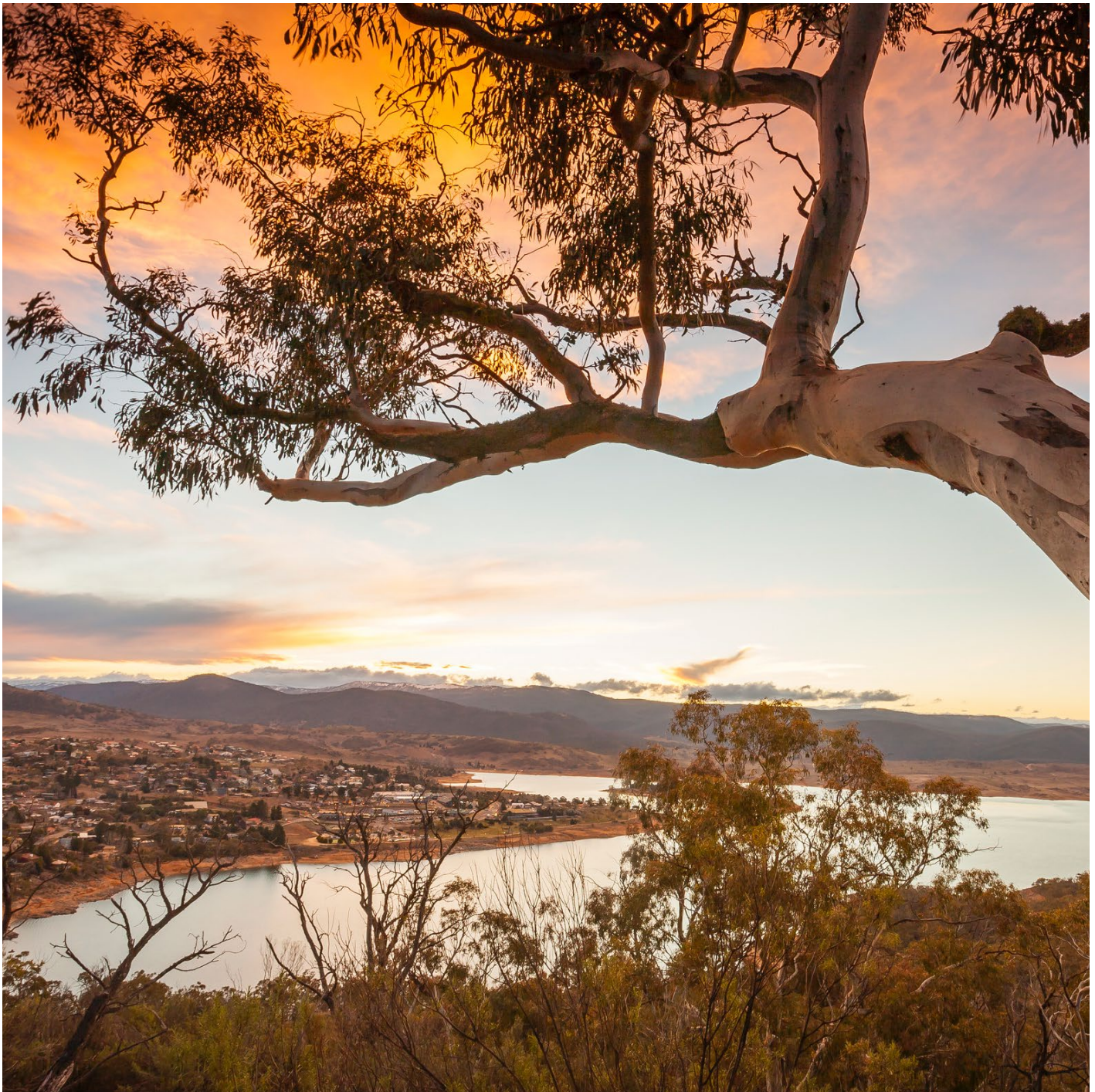


Image courtesy of Destination NSW. Lake Jindabyne, NSW.

Department of Climate Change, Energy,
the Environment and Water