

# Regional Water Strategy

NSW Murray – Executive Summary

December 2025



**Published by NSW Department of Climate Change, Energy, the Environment and Water**  
[nsw.gov.au/departments-and-agencies/dcceew](https://nsw.gov.au/departments-and-agencies/dcceew)

**Title** Regional Water Strategy

**Sub-title** NSW Murray – Executive Summary

**First published** December 2025

**Department reference number** PUB25/632

**Cover image** Image courtesy of Destination NSW. Kosciuszko National Park, NSW.

**More information** [water.dpie.nsw.gov.au/plans-and-programs/regional-water-strategies](https://water.dpie.nsw.gov.au/plans-and-programs/regional-water-strategies)

#### **Acknowledgements**

Thanks to the Murray–Darling Basin Authority, Snowy Hydro Limited, Department of Energy, the Environment and Climate Action Victoria, ACT Government and Icon Water for their collaboration in hydrological modelling to inform the development of this strategy.

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# Acknowledging Aboriginal people

The NSW Government acknowledges the Traditional Owners and Custodians of the lands, water, sea and Country. We pay respect to Elders past and present, and future leaders.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

We show our respect through thoughtful and collaborative approaches to our work. We seek to demonstrate our ongoing commitment to providing places where Aboriginal peoples and communities are included socially, culturally and economically to self-determine their own futures.

The NSW Government acknowledges the Bangerang, Barapa Barapa, Barkandji, Bidhawal, Kureinji, Maljangapa, Maraura, Mutthi Mutthi, Ngarigu, Ngiyampaa, Tati Tati, Wadi Wadi, Walgalu, Weki Weki, Wemba Wemba, 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 Aboriginal 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 Aboriginal 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 Aboriginal people are included socially, culturally and economically.

As we refine and implement the NSW Murray Regional Water Strategy, we commit to helping support the health and wellbeing of waterways and Country by valuing, respecting and being guided by Aboriginal 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 Aboriginal people/Traditional Owners hold a strong voice in shaping the future for all communities.

Artist and designer Nikita Ridgeway from Aboriginal design agency, Boss Lady Creative Designs, created the People and Community symbol.

# The NSW Murray region

The NSW Murray Regional Water Strategy region (Figure 1) lies in southern NSW and includes varying 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 industries and nationally important wetlands, including 2 that are Ramsar listed.

The region is located within the traditional lands of the Bangerang, Barapa Barapa, Barkandji, Bidhawal, Kureinji, Maljangapa, Maraura, Mutthi Mutthi, Ngarigu, Ngiyampaa, Tati Tati, Wadi Wadi, Walgalu, Weki Weki, Wemba Wemba, Wiradjuri and Yorta Yorta nations. These nations have been caretakers of the NSW Murray region for over 60,000 years.

The NSW Murray region is part of the broader southern connected Murray–Darling Basin (MDB), with water systems intricately linked to the Murray, Darling, and Murrumbidgee rivers. Importantly, the strategy also covers areas to the east of the Murray River that drain into the Snowy River system, which are hydrologically connected to the MDB through the Snowy Mountains Hydro-electric Scheme (the Snowy Scheme). These eastern catchments play a vital role in regional water management and planning, with water transfers

governed by the Snowy Water Licence contributing to flows within the MDB system. The region also includes coastal draining parts of South NSW.

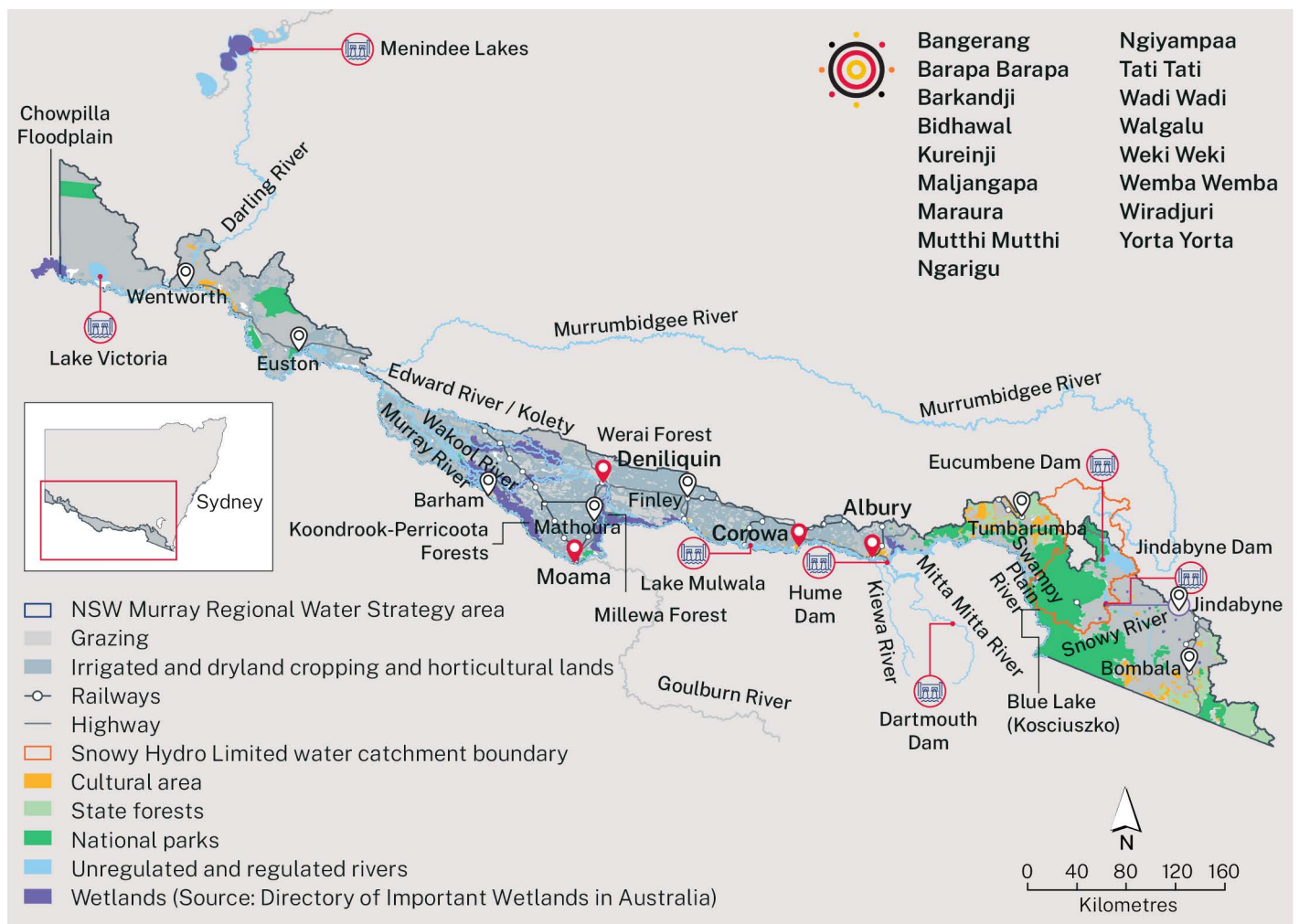
The NSW Murray region is endowed with surface water and good quality groundwater for towns, recreational use, cultural and environmental needs, and industry. Due to the region’s highly variable climate, groundwater is an important water source for the region.

As experienced over the last 2 decades, severe droughts can be followed by significant rainfall events and flooding. These extreme events pose challenges for the region, its water resources and all water users.

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. To do this, we need to make the best use of existing water resources and prepare for future uncertainty presented by a more variable and changing climate.

Like other regions across Australia, the NSW Murray region faces a more variable and changing climate. We need to transition to a scenario where more can be done with less water, smarter decisions are made about water use and management (based on better knowledge and information) and important water needs are protected.

**Figure 1. Map of the NSW Murray region**



## Environmental significance of the NSW Murray region

Water is a significant feature of the NSW Murray region's landscape and environment. Environmental assets play a crucial role in the region's liveability and provide recreational and tourism opportunities.

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 NSW Murray is home to 2 nationally important wetlands and the region's waterways support several threatened or endangered species including the Murray cod, Macquarie perch, Southern bell frog and Corroboree frog. In addition to the waterways, the alluvial sediments of the Murray River also play an important role in supporting groundwater-dependent ecosystems.

## Economic significance of the NSW Murray region

The NSW Murray region has a diverse economy, reflecting its varied landscape and climate. The region is acknowledged as one of Australia's premium agricultural areas. The wider Riverina–Murray area is renowned as 'Australia's food bowl' and makes the largest regional contribution to agricultural production in NSW.

In 2016, over 65,000 people were employed across the NSW Murray region. Economic output for the NSW Murray region was over \$9.6 billion in 2018/19 and accounted for 1.7% of NSW's economic output (measured by gross value added). Agriculture is a key contributor to economic output across the NSW Murray region.

The estimated total regional exports for the NSW Murray region was over \$8.7 billion in 2016, of which manufacturing (including value added food or fibre processing) accounted for approximately 34%. Agriculture, forestry and fisheries accounted for approximately 23%.

The primary employment sector in the NSW Murray region is health care and social assistance, followed by agriculture and manufacturing. Tourism is also a major employing sector; with more than 6,600 across the accommodation and food services and retail trade sectors in 2016. The tourism sector is the largest employer in the eastern Murray local government areas, employing 17% of the region's workforce. In both the central and western Murray areas, tourism employs 8% of the region's workforce.

Water is a critical enabler of many businesses in the region, especially agriculture and hydroelectricity. The region's water resources also support indirect water users, including the tourism and manufacturing sectors.



Image courtesy of Destination NSW. Junction of the Darling River and the Murray River, NSW.

# Purpose of the NSW Murray Regional Water Strategy

Pressure on water resources is increasing, and the climate is changing. We need to prepare our regions for the future now. Regional water strategies do this by bringing together the best and latest climate evidence with a wide range of tools and solutions to plan for and manage the water needs of regional NSW over the next 20 years.

The NSW Murray Regional Water Strategy will provide a long-term strategic plan to enable communities, the environment and industries to be better prepared for a future changing climate. This will help keep the NSW Murray region an attractive place to live, work and visit.

The NSW Murray Regional Water Strategy identifies the critical challenges we need to tackle over the coming decades. It also lays out the strategic priorities and actions to respond to these challenges and to provide a foundation to build resilience.

Meaningful engagement and a collaborative approach to planning and decision making will be key to achieving sustainable and equitable outcomes over the strategy's 20-year horizon and beyond.

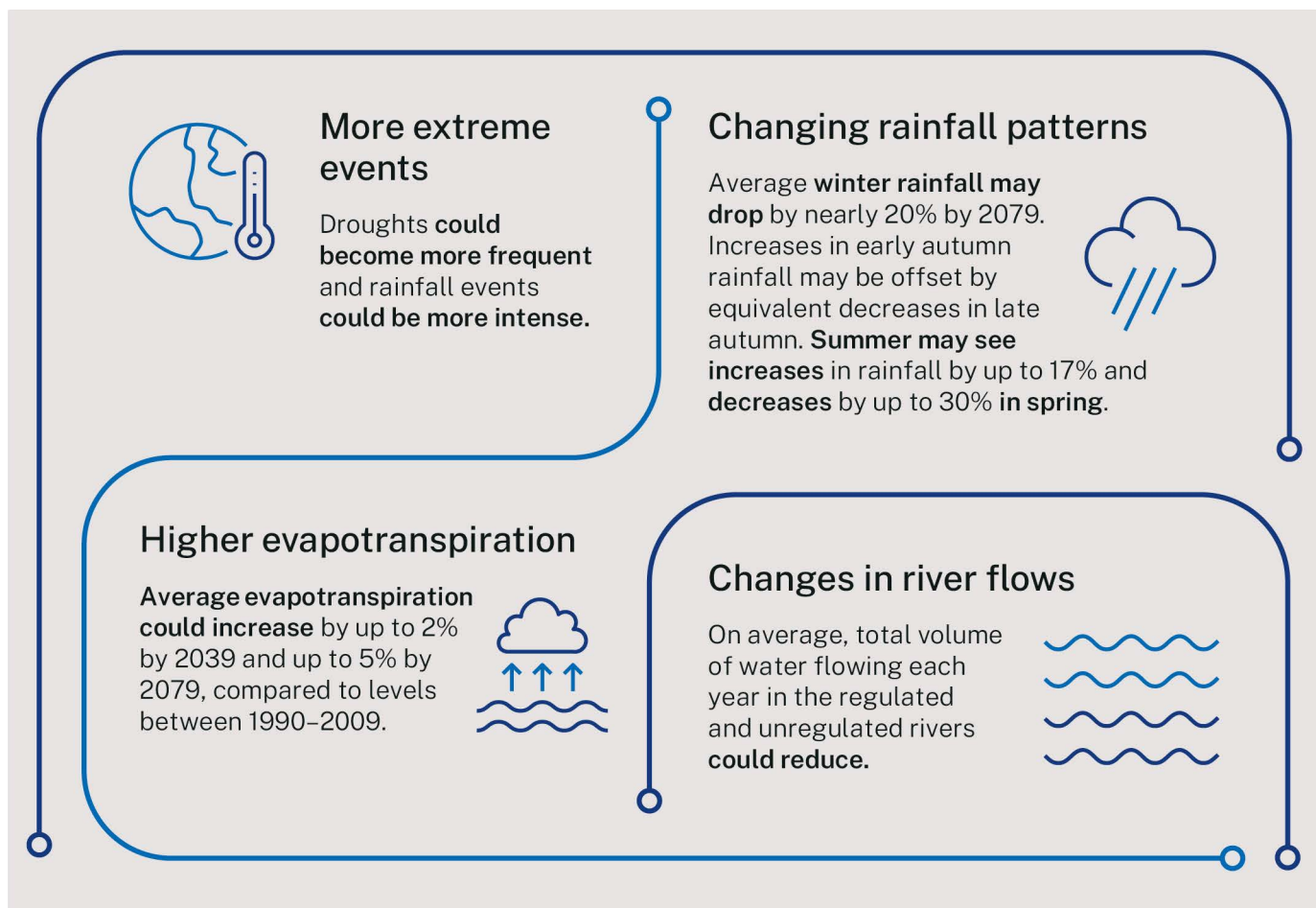
We need to ensure that the NSW Murray Regional Water Strategy remains adaptable so we can meet the future needs of all water users and the environment, and capitalise on future opportunities in the region.

## 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 hotter and longer droughts, higher evaporation rates, and more unpredictable rainfall events and variable river flows (Figure 2).

Ongoing planning for uncertainties and continued refining of water-related risks in the NSW Murray region is essential.

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



# The key challenges facing the NSW Murray region

We have identified 4 key challenges as immediate priorities for the region:

- 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.

Addressing these challenges will help us meet the vision and objectives we have set for 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, tourism and cultural needs. Balancing the interests of such diverse water uses and stakeholders is made possible by many, complex, inter-related governance and institutional arrangements that are overseen by multiple governments at state and federal levels.

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.

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.



## 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 initiatives<sup>1</sup> 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 platypuses and turtles), including some threatened species.

Parts of the Upper NSW Murray River and Snowy River catchments are in poor or very poor condition. Historical and current land and water management has resulted 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 records. This could magnify the negative impacts on riverine and floodplain ecosystems and aquatic species, as well as constrain 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. Initiatives established through the Murray–Darling Basin Plan, i.e. Australian Government water buybacks and SDLAM projects and programs such as the Reconnecting River Country Program and the Snowy Water Licence Review.



## Addressing barriers to Aboriginal people's water rights

Aboriginal people in the NSW Murray region have always been closely linked to rivers, creeks and groundwater sources, and their relationship to these water sources and wetlands is essential to culture, community and connection to Country.

Existing water management arrangements, a lack of water ownership, and poor access to waterways and culturally important sites restrict Aboriginal people from fulfilling their cultural obligation to care for Country and fail to provide opportunities for Aboriginal people in the NSW Murray region. Involving Aboriginal people more closely in decision-making processes around water management could enrich and improve our water management decisions and provide employment and economic-advancement opportunities for Aboriginal people, including youth.



## Supporting existing and emerging industries and livelihoods

Agriculture, agribusiness and hydro-electricity are the major water-reliant industries in the NSW Murray region. The region's 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. 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. While industries are expected to grow over the next 20 years and there is potential for future development in high value industries, a shortage of reliable water supplies may hinder this growth.

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 sustainably provide this drought support.

There are 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. It 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 Murray–Darling 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.



Image courtesy of Destination NSW. Lake Jindabyne, NSW.

# A plan to secure water for the NSW Murray region

We need to prepare now for a future where water may come under even greater stress. By using the knowledge gained during drought we can find smarter and better ways of making water go further so that communities, industries and environmental and cultural assets can thrive.

There are limits on how much water can be taken from rivers and groundwater sources without causing short-term and long-term impacts, such as depriving other users of reasonable access to water or permanently damaging ecosystems. Surface water and groundwater resources in the NSW Murray region

are fully committed and there is a risk of reduced water availability in the long-term. This means that any new infrastructure, policy change or population growth that may result in additional water or improved security for one group of water users may lead to water being taken from another group or from the environment.

Getting the balance right means understanding the stresses on the region's water resources and natural environment and recognising the limits and trade-offs. While we may have to make some difficult choices, there are also opportunities for the region. These opportunities include delivering on the water rights for Aboriginal people, increasing town and on-farm water efficiency, restoring aquatic and floodplain habitats through innovative means and developing alternative water supplies.

## How the challenges will be addressed

There is no single solution that can address the challenges ahead. This strategy sets out 22 actions arranged under 3 priorities (Figure 3) to ensure the NSW Murray region is well-placed to meet future challenges.

### **Priority 1: Continue to improve water management**

Effective water resource management in the NSW Murray region requires a holistic, integrated and evidence-based approach, involving the cooperation of various stakeholders, government bodies and the community. 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 to safeguard the well-being of communities.

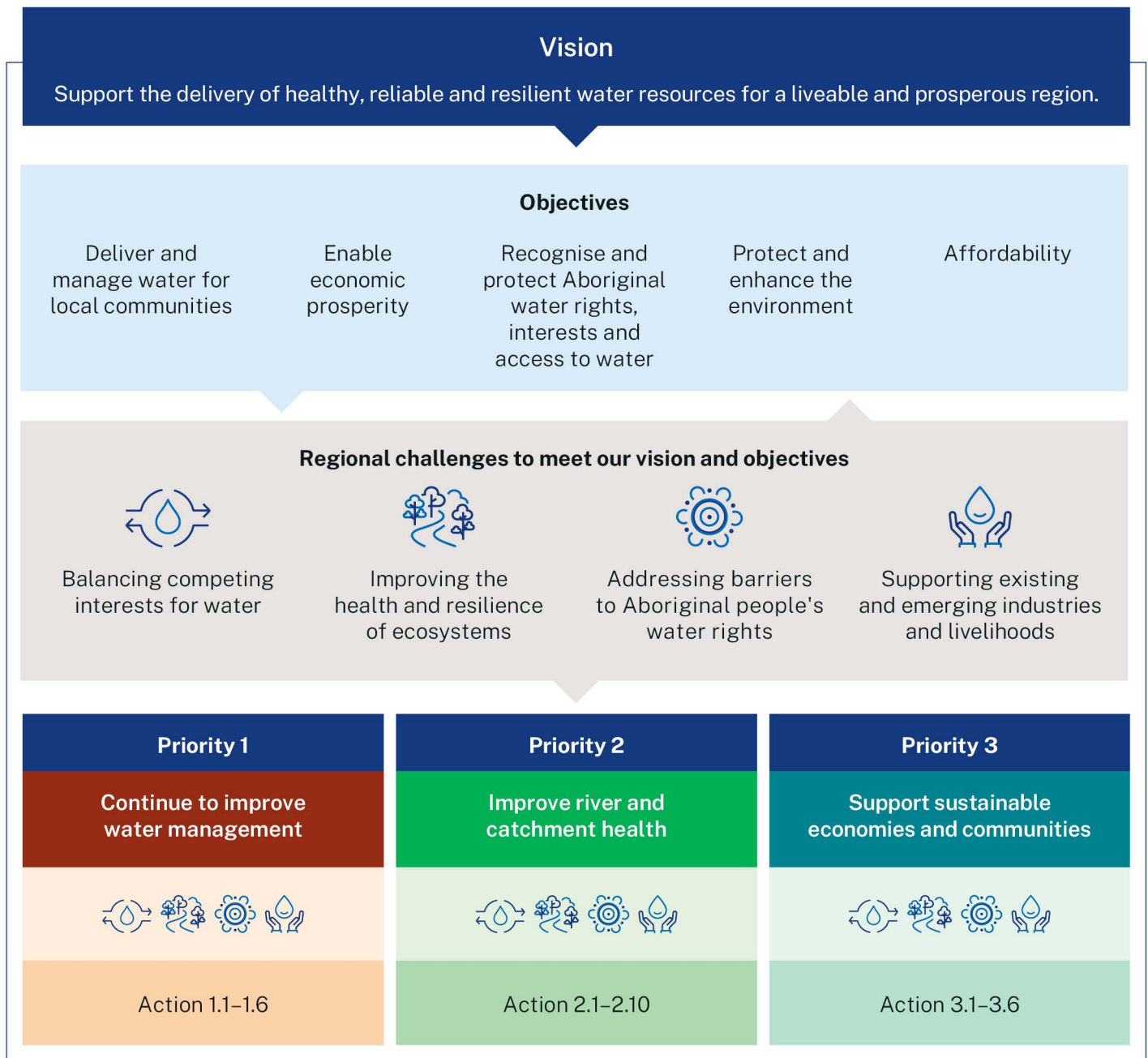
### **Priority 2: Improve river and catchment health**

Improved catchment health in the NSW Murray region will support the environment, economy and liveability of our communities. It will have far-reaching advantages, ensuring sustainable water resources for communities and ecosystems, and considering the cumulative impacts of land use change on water management. To improve catchment health our management systems and decision-making processes need to use a holistic, whole-of-catchment approach.

### **Priority 3: Support sustainable economies and communities**

In the future, the region is likely to experience higher water demand and increasing risks to the security of their water supplies from potentially declining water availability. This is in the context of a growing population and where agriculture, energy generation and tourism will remain important to the region's economy. This demand will put pressure on all water users, including the environment, and have flow-on impacts on the regional economy. It is vital to understand the risks and challenges to industries and communities to better manage water supply. It is also important that operational, planning and development decisions consider the likely reliability and security of future water supplies.

**Figure 3. NSW Murray Regional Water Strategy: an overview of the strategy’s vision, objectives, water security challenges and priorities**



**Figure 4. Summary of the NSW Murray Regional Water Strategy actions**

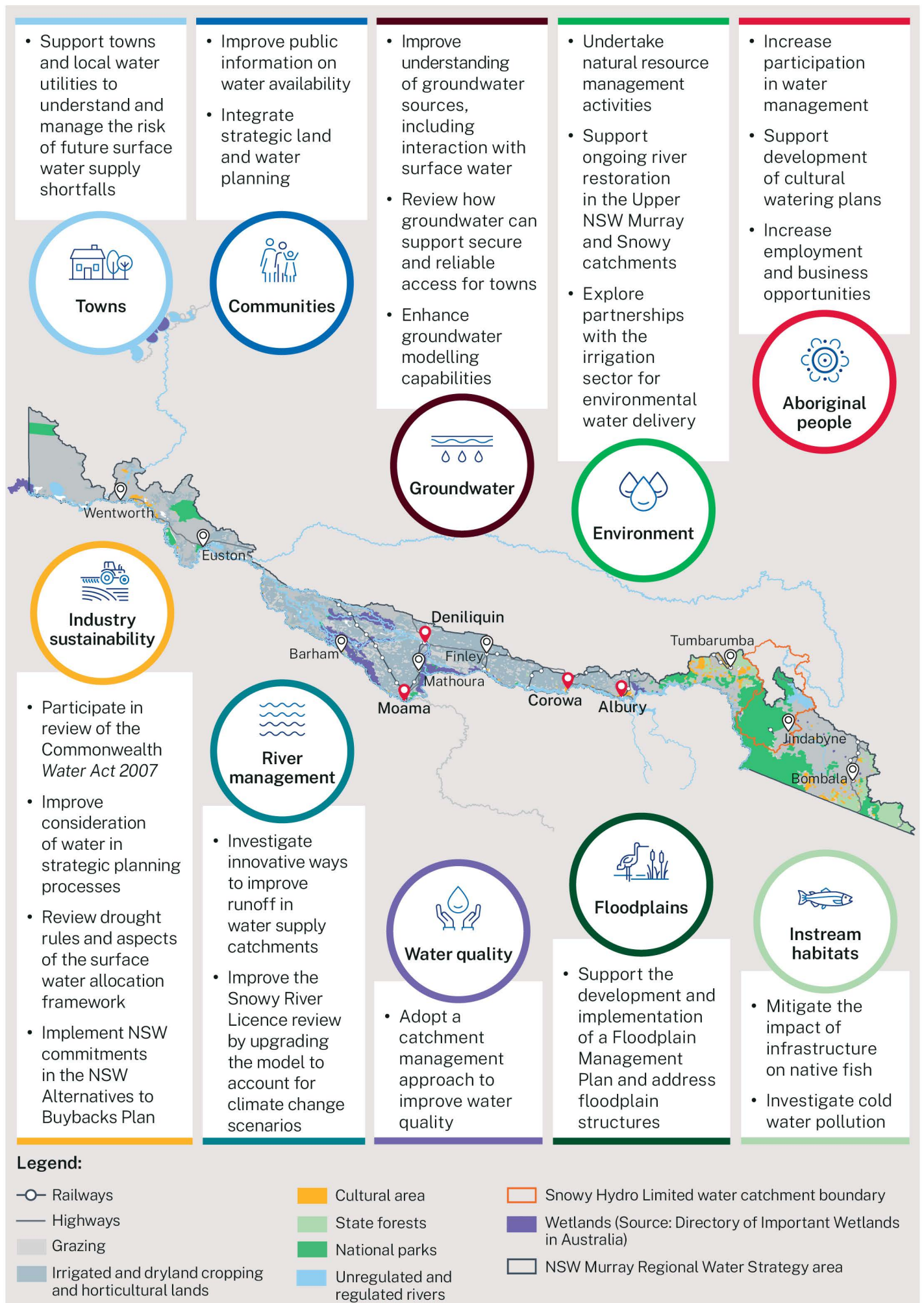































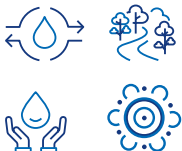













Figure 5. Priorities and actions to address the region's key challenges

Challenges in the NSW Murray region			
			
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

Priority	Actions	Challenges addressed
<b>Priority 1:</b> Continue to improve water management	<b>Action 1.1:</b> Improve understanding and management of groundwater sources	  
	<b>Action 1.2:</b> Improve strategic water management and decision-making frameworks by incorporating new climate and modelled data	  
	<b>Action 1.3:</b> Continue to build the climate evidence base for the next Snowy Water Licence Review	  
	<b>Action 1.4:</b> Strengthen the role of Aboriginal people in water management	 
	<b>Action 1.5:</b> Better integrate strategic land use and water planning	  
	<b>Action 1.6:</b> Work with Basin Governments to participate in the review of the Commonwealth <i>Water Act 2007</i>	  
<b>Priority 2:</b> Improve river and catchment health	<b>Action 2.1:</b> Rehabilitate ecologically and culturally important sites within the mid and lower catchment	 
	<b>Action 2.2:</b> Encourage partnership with the irrigation sector for environmental water delivery to public and private lands	   
	<b>Action 2.3:</b> Mitigate the impact of infrastructure on native fish	 
	<b>Action 2.4:</b> Support development and implementation of the NSW Murray Floodplain Management Plan (FMP) and address floodplain structures	 

Priority	Actions	Challenges addressed
<b>Priority 2:</b> <b>Improve river and catchment health</b>	<b>Action 2.5:</b> Continue to expand and update groundwater data collection and modelling to improve groundwater knowledge in the NSW Murray region	
	<b>Action 2.6:</b> Adopt a catchment management approach to improve water quality in the NSW Murray region	
	<b>Action 2.7:</b> Support delivery of cultural outcomes and how cultural values are identified for Aboriginal people	
	<b>Action 2.8:</b> Seek agreement with the Australian Government to develop and implement the Reconnecting River Country Program in the NSW Murray region	
	<b>Action 2.9:</b> Support ongoing river restoration in the Upper NSW Murray and Snowy catchments	
	<b>Action 2.10:</b> Improve the flow regime of the Snowy and montane rivers	
<b>Priority 3:</b> <b>Support sustainable economies and communities</b>	<b>Action 3.1:</b> Develop and enable employment and business opportunities for Aboriginal people	
	<b>Action 3.2:</b> Support groundwater use for towns and communities	
	<b>Action 3.3:</b> Investigate innovative ways to improve run-off in water supply catchments	
	<b>Action 3.4:</b> Support towns and local water utilities to understand and manage their future water security risks	
	<b>Action 3.5:</b> Implement NSW's commitments in the NSW Alternatives to Buybacks Plan	
	<b>Action 3.6:</b> Improve public access to climate information and water availability forecasts	

## Implementing the strategy

A critical feature of developing the NSW Murray Regional Water Strategy was deciding which actions and investments are needed now, and which will be needed in the future. With a 20-year timeframe, the NSW Murray Regional Water Strategy aims to time various actions to meet existing challenges, identify and prepare for coming challenges, and lay the groundwork for adapting to future uncertainties and evolving circumstances.

The strategy has a separate implementation plan<sup>2</sup> that outlines sub-actions that will be delivered in the first 5 years after the strategy is published. The implementation plan only focuses on sub-actions that are underway or planned (and funded) for delivery within 5 years by the implementation partners in this time period.

As funding is secured the implementation plan may be reviewed to accelerate their delivery.

The implementation plan also outlines responsibilities for delivery, so that the department can monitor the progress of the actions, assess the effectiveness of the strategy and identify areas that need adapting.

The implementation plan identifies the key partners involved in delivering the actions.

- NSW Government agencies will lead the implementation of actions that develop and review policies and regulatory arrangements, in consultation with the community, undertake research, deliver regional programs and take action when there is need for government intervention (e.g. a market failure). The NSW Government will also support local water utilities when needed.
- Local governments will be involved in actions that influence town water supply at the local level and will lead actions directly related to local-level strategic planning.
- State-owned corporations, such as WaterNSW, will be involved in actions that result in changes to the design, operation and management of major infrastructure and the way water is delivered in regulated rivers.
- Community and industry groups and research organisations will be engaged in the implementation process, and may partner with different levels of government to progress or deliver certain actions.

2. The implementation plan for the NSW Murray Regional Water Strategy is PUB25/631. Available at: [water.dccceew.nsw.gov.au/our-work/plans-and-strategies/regional-water-strategies-program/nsw-murray-regional-water-strategy](http://water.dccceew.nsw.gov.au/our-work/plans-and-strategies/regional-water-strategies-program/nsw-murray-regional-water-strategy)



Image courtesy of Destination NSW. Murray River, Barmah National Park.

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