# Regional Water Strategies Public Exhibition 2

Submission Questionnaire



# Macquarie-Castlereagh Regional Water Strategy Challenges and shortlisted actions

The NSW Government is taking action to improve long-term water security for Macquarie-Castlereagh. The Macquarie-Castlereagh Regional Water Strategy sets out a shortlist of proposed actions to help deliver healthy and resilient water resources for a liveable and prosperous region.

#### Your voice is important

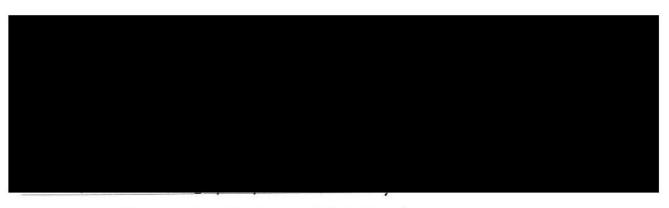
This is your opportunity to let us know which actions you support and think should be implemented to help set the region up for the future.

This questionnaire will take approximately 15 minutes to complete, and your response can remain anonymous if you wish (see question 7).

Questions marked with an asterisk (\*) require an answer.

If you have any questions about the questionnaire, please email: regionalwater.strategies@dpie.nsw.gov.au

You can also provide feedback via our submission platform.



\* Do you identify as an Aboriginal person? (select one)

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No

Choose not to answer

\* Are you making this submission as an individual or as a representative of an organisation? (select one)

Individual

Organisation

2. Organisation or business details
If making this submission as a representative of an organisation, who do you represent? (select one)
Government (select one)
Commonwealth New South Wales State other Local
Local Water Utility
Peak representative organisation (select one)
Environment Industry Business group or business chamber Community
Aboriginal organisation (select one)
Yes No
Other (select and provide details)  N/A

#### 3. Regional water challenges

We have identified **five water challenges** that are most important to address in the Macquarie-Castlereagh region. More detail about each regional challenge is available in the Consultation Paper.

#### 1 Reducing water supply risks for regional cities, towns and villages

Bathurst, Orange and Dubbo are large and growing regional cities in the Macquarie valley. These cities are expected to grow by 20–30% over the next 20 years. The water supplies for these cities also underpin the water security of surrounding smaller towns and communities during times of drought.

Even with recent investments in water security measures, Bathurst and Orange require further immediate investment over the next few years to ensure the security of their water supplies is maintained.

Groundwater is an important water source for towns in the region, being the primary source of supply for many towns and an important backup source for others. There is uncertainty about water security in severe drought for towns that use groundwater, especially from the alluvial groundwater systems.

# 2 Supplying water to high priority needs in the lower river system and connected valleys

The Macquarie River system is over 960km long and there are a range of high priority needs towards the end of the system, including:

- · the towns of Warren, Nyngan and Cobar
- · internationally significant Macquarie Marshes
- · critical mineral mines
- · landholders on rivers and creeks with stock and domestic water needs
- flows into the Barwon-Darling River that support communities, industries and the environment downstream

The long river system presents challenges for delivering water to the end of the system, particularly during dry periods, as a large portion of the water released from Burrendong Dam seeps into the dry riverbed and evaporates along the way.

A more variable and potentially drier climate will make it even more difficult to meet high priority needs towards the end of the river system, especially during dry periods.

# 3 Supporting a growing regional economy in a future of potentially reduced water availability

Agriculture and mining are major water-reliant industries in the Macquarie-Castlereagh region. The tourist economy is also important in the region's east and includes well-known food and wine destinations. Climate change could reduce water availability for these existing industries, leading 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.

#### 4 Addressing barriers to Aboriginal water rights

The lands and waters of the Macquarie-Castlereagh region have been occupied by the Wiradjuri, Gomeroi, Ngemba, Wailwan and Ngiyamapaa Nations for over 60,000 years. They have always been closely linked to rivers, groundwater, billabongs and wetlands, and this relationship is essential to culture, community and connection to Country.

Water management arrangements, limited water ownership, and poor access to waterways and culturally important sites impact Aboriginal people's ability to care for Country. 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.

# 5 Maintaining and improving the health and resilience of the region's aquatic and floodplains ecosystems

Water infrastructure, water extraction, land management practices, and pest species have impacted water-dependent ecosystems and native species in the Macquarie-Castlereagh region. This includes the internationally Ramsar-listed Macquarie Marshes, which is ecologically, culturally, socially and economically important.

While water reforms have partially improved the condition and resilience of these environmental assets, there are parts of the catchment that are still in poor condition.

To maintain and improve the region's ecological assets into the future, we need to ensure that the right mix of flows are available at the times that they need them. This will become increasingly difficult under a drier future climate, where the potential for extended dry periods could increase the risk for many critical environmental assets.

Do you agree that these are the priority water challenges for the Macquarie- Caștlereagh region that we need to focus on? (select one)				
Yes No				
f no, please outline he next 20 – 40 ye		he priority wate	er challenges in th	is region over

#### 4. Addressing the challenges

We have developed three regional priorities with actions under each. We want to know which of the actions you support.

The regional priorities are:

- 1 Secure water supplies for growing regional cities and towns
- 2 Reduce water security risks in the region's west
- 3 Supporting industry and community climate adaptation
- 4 Best use of existing water for the environment

#### Priority 1: Secure water supplies for growing regional cities and towns

The actions shortlisted under this priority aim to:

- · make better use of the available resources
- · respond to the needs of a growing population
- · respond to the risks associated with climate variability and change.

Prop	oosed action	Do you support this action?		
1.1	Confirm the level of water security needed to support regional cities	Yes No		
1.2	Establish a governance framework to coordinate actions under Priority 1	Yes No		
1.3	Develop guidelines for managing extreme events in the upper Macquarie	Yes No		
1.4	Adopt a stronger focus on urban water conservation and efficiency	Yes No		
1.5	Invest in innovative water supply options	Yes No		
1.6	Plan for the best long-term augmentation solution for the upper Macquarie	Yes No		
1.7	Reduce uncertainty in groundwater security for the region's towns	Yes No		
1.8	Support management of Oberon's town water quality issues	Yes No		

#### A) Do you have any comments on the proposed actions identified?

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#### Priority 2: Reduce water security risks for the Lower Macquarie

The actions shortlisted under this priority aim to:

- deliver water more efficiently to high priority needs and reduce town water security risks in the lower Macquarie region
- · improve the drought resilience of industry in the lower Macquarie region.

Prop	osed action	Do you support this action?
2.1	Investigate an additional off-river storage at Nyngan	Yes No
2.2	Create water savings through changed operation of regulated effluent creeks	Yes No
2.3	Continue to investigate regional water security solutions for the lower Macquarie	Yes No
2.4	Investigate ways to improve connectivity with the Barwon- Darling on a multi-valley scale	Yes No

#### A) Do you have any comments on the proposed actions identified?

We strongly oppose the changed operation of the regulated effluent creeks.

The Back, Ganningbar and Upper Crooked creeks are a haven for bird life and the diversity are a haven for bird life and the diversity of plants and animals that come in varied seasons is incredible. In many ways an extension seasons is incredible. In many ways an extension of the Haguarie Harshes.

The creeks have major cultural significance tourism x farming operations that can't be forgotten about, farmers have privately invested significantly to the system given their refrance significantly to the system given their refrance on the creeks for stock & donestic water & irrigation needs.

#### Priority 3: Support industry climate adaptation

The actions shortlisted under this priority aim to:

• strengthen the resilience of the regional economy, including existing businesses, industries and communities, and their adaptation to a drier, more severe future climate.

Prop	osed action	Do you support this action?
3.1	Invest in continuous improvement to surface and groundwater modelling	Yes No
3.2	Improve public access to climate information and water availability forecasts	Yes No
3.3	Support adoption of on-farm climate adaptation and water efficiency measures	Yes No
3.4	Undertake research to inform reviews of groundwater extraction and condition limits	Yes No
3.5	Develop ongoing arrangements for participation of local Aboriginal people in water management	Yes No
3.6	Support place-based initiatives to deliver cultural outcomes for Aboriginal people	Yes No
3.7	Support the development of new water related Aboriginal business opportunities in the Macquarie-Castlereagh region	Yes No
3.8	Modernise the water management framework so it can continue to support sustainable economic diversification	Yes No
3.9	Improve public access to the Macquarie Marshes	Yes No

3.9 Improve public access to the Macquarie Marsnes		yes No
) Do you have any comments on the proposed actions id	entified?	

#### Priority 4: Best use of existing water for the environment

The actions shortlisted under this priority aim to:

- · limit or remove pressures and impacts related to water infrastructure
- · enable water for the environment to be delivered to its best effect during wet and dry periods
- build knowledge of the region's water dependent ecosystems and assets, and the impacts of climate change on their health and resilience
- · improve water resource health through better land management.

Prop	osed action	Do you support this action?
4.1	Modify or remove barriers to delivering water for the environment	Yes No
4.2	Reinstate natural channel profiles in selected streams in the southern Macquarie Marshes	Yes No
4.3	Mitigate impacts to fish communities	Yes No
4.4	Remediate unapproved floodplain structures	Yes No
4.5	Provide clarity and certainty for environmental needs during drought operations	Yes No
4.6	Assess gaps in the flow regime and identify cooperative actions to improve ecological outcomes	Yes No
4.7	Fully implement the NSW Floodplain Harvesting Program	Yes No
4.8	Identify regionally significant riparian, wetland and floodplain areas to protect or rehabilitate	Yes No

A) Do you have any comments on the proposed actions identified?

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regions	ally	signific	court M	larion o	ved as a
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5. Other comments
A) Should any proposed actions in this Consultation Paper not be shortlisted and why?
B) Should any other options in Attachment 1 of the Consultation Paper be shortlisted and why?
<ol><li>Implementation of the Macquarie-Castlereagh Regional Water Strategy</li></ol>
An Implementation Plan will be included in the final Macquarie-Castlereagh Regional Water Strategy.
A) Which actions should be implemented first and why?

#### Making your submission public

To promote transparency and open government, we intend to make all submissions publicly available on our website, or in reports. Your name or your organisation's name may appear in these reports with your feedback attributed.

If you would like your submission and/or feedback to be kept confidential, please let us know when making your submission.

If you request that your submission is to be kept confidential, it will not be published on our website or included in any relevant reports; however, it will still be subject to the *Government Information Public Access Act 2009*.

Your submission will be stored securely, consistent with the department's Records Management Policy and you have the right to request access to, and correction of, your personal information held by the department.

Further details can be found in our privacy statement available on our website. <a href="https://www.industry.nsw.gov.au/privacy">www.industry.nsw.gov.au/privacy</a>

7. Information on confidentiality and privacy *	
give permission for my submission to be publicly available on the NSW Department of Planning and Environment website.	
Yes No	
would like my personal details to be kept confidential.	
Yes No	

8. Would you like to be kept updated on progress on the development and implementation of the Macquarie-Castlereagh Regional Water Strategy?

If yes, please provide your details below.

### 9. How did you hear about the Public Exhibition of this strategy?

We are interested to know how you heard about the opportunity to make a submission. Please indicate the communication methods below:

Newspaper Radio De	epartment of Planning and Environment website
Direct email Social media	Have your say NSW Government website
Communication from peak body	Word of mouth
Other (select and provide details)	

#### 10. Additional Information

If you would like to provide any supporting documents to help us understand your feedback, please email these from the same email you provided in this form or attach supporting documents to this form if you are returning your submission by mail.

All submissions on the draft Macquarie-Castlereagh Regional Water Strategy will be reviewed following the public exhibition period.

Please email your completed submission and any supporting documents to:

regionalwater.strategies@dpie.nsw.gov.au

#### Or post to:

Regional Water Strategies Department of Planning and Environment Locked Bag 5022 Parramatta NSW 2124

#### Submissions close Friday 18 November 2022, 11.59pm

Further details on all regional water strategies can be found on our website www.dpie.nsw.gov.au/regional-water-strategies



Thank you for your submission.





#### Creeks Association

The Gunningbar offtake at Warren for irrigation and a requirement to maintain a visible flow to The Gunningbar and Duck creeks and a portion of the Crooked creek as PROCLAIMED streams For stock and domestic water from burrendong dam regulation together with irrigation licences For landholders has been built into land market values for landholders with frontage to those Streams.

The creeks association has actively enhanced those requirements at their expense when problems Have occurred with good water saving results

A by-pass channel was constructed on the Duck creek when flood outs were a problem

And in recent years to overcome a flow problem the creeks association funded the channel from

The Gunningbar creek to the Bennabilla creek with a gate valve controlled by water NS W.

This greatly improved the Duck creek with a reliable flow that stops the requirement for a higher flow to get through the problem area

From time to time a water release for the mine at Nyngan needs a higher flow in the Gunningbar Creek which floods out above the Fairview dam.

Construction of a water flow gate controlled by water NSW. sufficient to overcome that problem With NO DISADVANTAGE to the landholders as it can be closed once the water is through and let Flow through the existing pipes. This should be funded by the creeks association and designed by Water NSW.

For the betterment of the environment and bird life over a very large area of the WARREN and NYNGAN districts in concert with the irrigation industries positive contribution to prosperity. The creeks association should acknowledge this with a vote of thanks to his efforts. Many individuals have made improvements to water use for both stock and domestic and Irrigation efficiencies in the Macquarie valley which should be acknowledged freely.



CREEKS ASSOCIATION (Gunningbar & Duck creeks

Water saving on an INDIVIDUAL basis

was purchased in January 1994

There were 18 kilometres of channels to fill 18 dams on average 2 metres deep with timber Cording in one corner for the horse and scoop to drag out the dirt.

We used to pump water 3 times every summer to fill the dams. Those dams are all now 6 metres deep with contour banks to assist rainwater fill. In the last six years we have had To pump water for stock and domestic water once and bearing in mind sheep and cattle have Access in most paddocks with give and take boundary fences along the Gunningbar And Duck creeks to water.

For domestic water a new sub-artesian bore was put down for houses and sheds and stock yards.

The creeks are a haven for bird life with black swans nesting on islands in the creeks and

Bower birds collecting glass to build and attract a mate along the banks and brolgas taking off

Into the wind in delicate fashion and many more water birds nesting in the trees along the water.

You have to live in those areas to see and understand the enormous diversity of plants and Animals that come in varied seasons and grow with different rainfall events at different times

We must surely acknowledge NSW WATER for their professional management of flood Water peaks and troughs with telemetric technology in as difficult circumstances that we have Seen in a long time and such a widespread area.

