**Department of Planning and Environment** 

## **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

Your details			
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o you identify as	an Aboriginal persor	n? (select one)	
No.	Choose not to answer		
Are you making th	is submission as an i	ndividual or as a rep	resentative of
an organisation? (s	elect one)		
Individual Or	ganisation		
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If making this submission as a representative of an organisation,

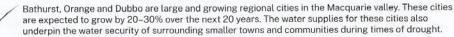
#### 2. Organisation or business details

who do you represer	nt? (select one)		
Government (select one	)		
Commonwealth	New South Wales	State other	Local
Local Water Utility			
Peak representative org	ganisation (select one)		
Environment I	ndustry Business g	group or business cha	mber // Community
Aboriginal organisation	(select one)		
Yes No			
Other (select and pro	ovide 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



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
- V. 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 fresources.

## 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.

## Regional Water Strategies Public Exhibition 2 | Submission Questionnaire

Do you agree that these are the priority water challenges for the Macquarie-Castlereagh region that we need to focus on? (select one)

If no, please outline what you see as the priority water challenges in this region over the next 20-40 years?

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I below them, diverting water
from natural waterconfees to
new water ways.

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#### 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
- $\sqrt{3}$  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
- $\checkmark$  respond to the risks associated with climate variability and change.

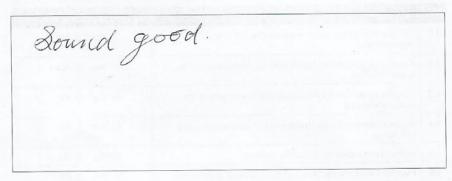
Pro	posed action	Do you support this action?
1.1	Confirm the level of water security needed to support regional cities	Yes No
1.2	Establish a governance framework to coordinate actions under Priority 1	Yes No
1.3	Develop guidelines for managing extreme events in the upper Macquarie	Yes No
1.4	Adopt a 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

#### 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.

Propo	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



#### 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 please explain
3.7	Support the development of new water related Aboriginal business opportunities in the Macquarie-Castlereagh region	Yes No Dit D.
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 in what w

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#### 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
- $\checkmark$  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.

Proposed 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 Ves	
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	