Regional Water Strategies Public Exhibition 2

Submission Questionnaire

Macquarie 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

Your details

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) Yes 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)

1.

Commonwealth New South Wales

State other

Local

Local Water Utility

Peak representative organisation (select one)

Environment IndustryBusiness 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-Castlereagh region that we need to focus on? (select one)

Yes No

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

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	osed action	Do you support	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 Yes towns		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?

The Commonwealth Environmental Water Office (CEWO) is supportive of examining a range of options that improve water security for towns and industries, which can be particularly challenging during dry times. The environmental (including any impacts to matters of national environmental significance), economic, and social/cultural impacts and benefits of the various actions would need to be assessed as part of these investigations. The potential impacts on surface and groundwater systems, planned environmental water, implications for the Sustainable Diversion Limit and the Basin Plan and relevant water sharing plans of the proposed actions need to be considered carefully. Facilitated impacts and actions, those which are made possible by the proposed action, would also need to be carefully considered when assessing the actions.

As noted in our previous submission, the CEWO recognises the primacy of securing water supplies for critical human water needs. We also acknowledge the challenges in achieving a balance in the sharing and use of water under these circumstances that meets the objectives of the *NSW Water Management Act 2000*. However, priority should be given to maximising the benefits of existing infrastructure options together with options that reduce demand, are cheaper and have less impact on the environment and water users.

The document highlights the potential impacts of climate change which suggest rainfall and inflows are expected to be lower with more intense events, an increased risk of low inflow sequences to Burrendong, longer dry periods and changes in seasonality. These changes may reduce the effectiveness of some of the proposed actions and may also increase pressure on groundwater supplies. Actions focused on water security planning for large towns and regional cities around an 'enduring level of supply' approach (proposed action 1.1) need to ensure environmental, social and cultural requirements are included in the assessment, and potential climate change impacts. Any governance framework to coordinate actions under this priority (proposed action 1.2) will need to ensure that the suite of impacted groups, including the environment are represented. Clear and transparent communication about decision-making under these approaches and frameworks is also required.

Developing guidelines for extreme events in the upper Macquarie would provide clarity and transparency about how decisions are made and communicated during extreme events to help meet critical needs (proposed action 1.3). Some of the options in the strategy include suspension of environmental and irrigation releases. Extended dry periods put critical environmental assets and riverine processes at risk, impact users that rely on river flows and can impact groundwater systems. The guidelines need to ensure consistency with the priorities in the *NSW Water Management Act* 2000 and should address how these systems will be operated to meet critical human, environmental and cultural needs.

The CEWO is supportive of actions that focus on water conservation and efficiency which can help reduce water demand (proposed action 1.4) or provide alternative water supplies (proposed action 1.5). Water restrictions, conservation measures, stormwater harvesting and reuse, addressing leaks, smart metering and pricing, advanced treatment, augmenting supplies, and reducing reliance on supply from some surface and groundwater systems would all improve water security. These actions may be more cost-effective and have fewer environmental impacts than new large-scale infrastructure options. Some reuse and recycling actions may also improve the quality of run-off to the local rivers and streams. Proposed actions such as managed aquifer recharge may support more sustainable access to water in some locations. Further investigation of these actions would need to include an assessment of the potential environmental impacts on aquifers and surface water systems and potential changes to the water sharing processes and plans.

Proposed action 1.6 includes a range of potential water security solutions to support the upper Macquarie. As noted in our previous submission, the economic and environmental costs and benefits of additional infrastructure should be evaluated carefully. The environmental impacts from pipelines depend on the location and the scale of the water transferred via pipelines. Moving water between regions can be energy intensive. The impact on water availability, surface and groundwater systems, their associated biota, and ecological processes in both the originating and receiving water sources needs to be thoroughly assessed. Please also see our previous submission for other issues and considerations.

Many towns and communities in parts of the Macquarie are reliant on groundwater for water supply and some towns reliance on groundwater increases during drought. The draft strategy notes that groundwater levels can decline in pumping season and during drought. Any proposed actions that result in an increased reliance on or use of groundwater require careful evaluation to ensure the ongoing sustainability of the resource is not compromised and surface and groundwater dependent ecosystems are protected. Most of the investigations included under action 1.7 would help provide an improved understanding of groundwater, improved quality, or improved certainty in the groundwater resources locally. However, one option under proposed action 1.7 includes exploring the option of granting temporary licences to access groundwater during drought. This may increase the reliance on groundwater systems during dry times, lead to further declines in groundwater levels, and may exacerbate the impacts on groundwater dependent ecosystems, surface water systems, and other water users. Further consideration of proposed groundwater actions should be informed by the additional work proposed in actions 3.1 and 3.4.

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.

Proposed	action	Oo 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	

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?

A range of options have been proposed to help address water security risks in the Macquarie. As noted in the priority above and our previous submission, the environmental, economic, social, and cultural impacts and benefits of the various actions need to be assessed thoroughly.

Further consideration of an additional off-river storage ay Nyngan (proposed option 2.1) should ensure there are no impacts on the existing population of olive perchlet, a threatened species, in the Nyngan weir pool or reduce water available for other assets/users in the Macquarie.

As noted in our previous submission, reducing the permanency of flows and introducing variability in Gunningbar Creek could be beneficial to the Gunningbar Creek system and achieve water savings (proposed option 2.2). However, there would need to be provisions to ensure the environmental water requirements of the creek are met. These provisions should not rely on water currently held by environmental water managers to meet the additional environmental demands. Clarity about where any water savings would be directed is also required.

The CEWO has concerns about the potential environmental impacts of several of the proposals listed under proposed action 3.2. Many of the comments made around them in the previous CEWO submission about these proposals still stand.

- Use of the Burrendong flood mitigation zone to augment water supply: The CEWO has significant concerns about this proposed action. Changes to the volume of water held behind the flood mitigation zone and/or operational releases may impact on the volume of planned environmental water provided by the Water Sharing Plan. The proposed change could result in significant changes to flows to the Wambuul/Macquarie River and the Macquarie Marshes. The potential environmental impacts of using Burrendong flood mitigation zone to provide additional water supply, particularly in relation to flows to the Wambuul/Macquarie River, the internationally significant Macquarie Marshes and connectivity with the Barwon require thorough assessment. The document refers to average flows and no net change to flows in the analysis of the effects. Assessments that use net flows or average flows to the river or Macquarie Marshes may not reflect important impacts on flow rates, timing, duration, extent, frequency, seasonality of those flows which can have environmental and ecological impacts. The strategy notes that the frequency of Burrendong Dam exceeding the existing full supply level may reduce under climate change, which may reduce the effectiveness of this option. Holding additional water in the dam would also require assessment against the SDL, and potential growth in use under the Basin Plan. Based on the information available, the CEWO is unable to support this proposed action.
- Replacement of Gin Gin Weir. as noted in our previous submission, the location, design and
 operation of the weir will influence the level of impact on the environment including on Matters of
 National Environmental Significance such as the Macquarie Marshes and threatened species
 such as Murray cod. Building a re-regulating structure has been referred under the Environment
 Protection and Biodiversity Conservation Act 1999. We note that the impacts of the proposed
 structure will be assessed in the Environmental Impact Statement.
- Regional pipeline: Piping water can improve delivery efficiency, substantially reducing the volume
 of water required for transmission from the source to the demand point. However, the economic
 and environmental costs and benefits of regional pipelines need careful evaluation. The impact on
 surface and groundwater systems, their associated biota, and ecological processes in both the
 originating and receiving water sources needs to be assessed. The document notes there could
 be a small reduction in the average inflow to Marshes from this option. However, as noted above,
 the use of averages may not reflect changes in the size, timing, duration and seasonality of events
 that can impact on ecosystems of the Macquarie River and Marshes or reflect changes between
 dry and wet periods. Please refer to our previous submission on the long list of options for further
 information.

Improving the longitudinal connectivity from tributary catchments such as the Macquarie to the Barwon-Darling (proposed action 2.4) is important for supporting riverine ecosystems and processes, food webs, productivity, water quality and native fish and other aquatic organisms in both these systems. Connectivity with the Barwon-Darling also has a range of social and cultural benefits. There is generally strong connectivity between the Macquarie and the Barwon-Darling during wet times but connectivity can be impacted outside these times. The CEWO is supportive of options that improve connectivity along river and wetland systems and remove impediments to passage of fish and other aquatic biota. Protecting and restoring connectivity is an objective of the Basin Plan and an expected outcome of the Basin-wide Environmental Watering Strategy and will continue to be an increasing priority for the CEWO under a drying climate.

Active management is helping to improve connectivity by some water for the environment (held water) through the Macquarie and into the Barwon. However, there may be additional ways to improve connectivity with the Barwon. We note that the Natural Resources Commission is currently reviewing the Water Sharing Plan for the Macquarie Bogan Unregulated Rivers Water Sources 2012 and may consider the issue of improving connectivity with the Barwon-Darling

Priority 3: Support industry climate adaptation

The actions shortlisted under this priority aim to:

	Proposed action	Do you support this action?		
3.1	Invest in continuous improvement to surface and groundwater modelling	Yes No		
3.2	2 Improve public access to climate information and water availability forecasts			
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			
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		

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

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

The CEWO is supportive of actions that help build knowledge and understanding about surface and groundwater systems in the Macquarie region (proposed actions 3.1 and 3.4). This new knowledge is even more important in the context of climate change. Understanding sustainable access to groundwater is essential to implementing existing water sharing plans and to inform future actions that have the potential to increase reliance on groundwater resources. Improving knowledge and protection of groundwater dependent ecosystems should be part of this work. This would help improve understanding of the potential impacts to these systems from water resource development,

climate change, groundwater extraction and other factors. This work should be considered in implementation of other proposed actions including 1.5 and 1.7.

Improving the availability of climate and water information to the public would improve public confidence in water planning and management (proposed action 3.2). It would be beneficial to increase the transparency and certainty around surface and groundwater availability and management as part of this process. Please refer to our previous submission for further information.

The CEWO acknowledges the Traditional Owners of the Macquarie Valley and the deep cultural, social, environmental, spiritual and economic connections they hold to their lands and waters. Healthy rivers and full waterholes and weir pools also contribute significantly to the health and wellbeing of Aboriginal communities along the rivers. As noted in the previous submission, the CEWO supports improving recognition of Aboriginal people's water rights, interests, and access to water.

The CEWO strongly supports genuine inclusion and participation of local Aboriginal people in water planning and management (proposed actions 3.5 and 3.6). The CEWO is committed to working meaningfully with First Nations peoples. Our aim is to include First Nations peoples' values and knowledge in the planning and management of water for the environment. We will continue to build relationships with First Nations' organisations and communities, to learn from and identify ways to support cultural values alongside environmental outcomes. Proposed action 3.6 identifies a range of potential programs that may help support improved cultural outcomes. Some of the proposed programs could help improve understanding of cultural values and traditional ecological knowledge and improve the ability of environmental water managers and river operators to support cultural needs through a range of water deliveries.

The CEWO supports efforts to improve business opportunities and broad sustainable economic diversification as provided by proposed option 3.7 the development of water related Aboriginal business opportunities. The CEWO is also supportive of the creation of licences specifically designed for cultural and economic water delivery which would enable Aboriginal communities to directly manage water to support their local values and sites on an enduring basis. We note that the water licence aspect will be considered in the NSW Aboriginal Water Strategy.

Any changes to the water entitlement and access framework (proposed action 3.8), including the potential for licence conversion from general security to high security licences, should be thoroughly assessed and include detailed consultation. Without further detail on the proposal, the CEWO is not in a position to support the option at this stage.

The Macquarie Marshes is an internationally significant wetland that generates significant local, regional, national, and international interest. The CEWO has also heard increased calls for improving public access to important sites such as the Macquarie Marshes from a range of stakeholders including to help support cultural access, educational, recreational, and tourism (proposed action 3.9). Much of the Macquarie Marshes is private or managed by state government as nature reserves. Increased public access would need to ensure consultation with these groups to minimise environmental impacts to the area and landholders. This action would help support proposed actions 3.5 and 3.6.

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.

	Proposed action	Do you support action?	this
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	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?

The CEWO is supportive of the proposed shortlisted actions, noting that most of the options listed as a high priority in our previous submission have been included in the shortlisted actions under Priority 4. Those actions identified as a priority for the CEWO and associated comments made in our previous submission are still relevant.

Removing barriers to delivering water for the environment (proposed action 4.1) would enable environmental water managers to increase flow rates to improve inundation of parts of the Macquarie Marshes and improve floodplain connection. The Macquarie Marshes Enhanced Watering Project is currently being progressed through the Northern Basin Toolkit. The CEWO is supportive of further investigation of other actions that may reduce constraints or barriers to delivery of water for the environment.

The CEWO is supportive of investigating and undertaking rehabilitation and restoration strategies at priority areas in the Macquarie Marshes (proposed action 4.2). The Commonwealth Environmental Water Holder recently provided a grant to the NSW Department of Planning and Environment (National Parks and Wildlife Service) to undertake the Macquarie Marshes Fish Passage project under the Commonwealth Environmental Activities Framework. The project will address barriers to fish passage and stabilise erosion risk at priority sites along the Breakaway in the southern section of the Macquarie Marshes Nature Reserve and help maintain flow distribution through the reserve.

The combination of river regulation, infrastructure, cold water pollution and pumping has impacted native fish populations in the northern Basin. These factors also impact on the achievement of environmental outcomes from water for the environment for native fish and other aquatic biota. The CEWO supports the range of proposed actions to mitigate the impact of water infrastructure on native fish (proposed action 4.3) including fish passage, implementing fish diversion screens and addressing cold water pollution as a high priority. The timeliness of undertaking works to improve fish passage and reduce cold water pollution in the Wambuul/Macquarie River remains a concern, considering the long time being taken to complete previous fish passage and cold water pollution commitments. The thermal curtain demonstrated benefits for river temperatures and river ecosystems while functional, however was fraught with issues. Burrendong Dam is often subject to algal blooms which have limited the effectiveness or use of multi-level offtake structures in ameliorating cold water pollution in other locations. This needs to be considered when determining an effective solution at this location. The measures and technologies adopted need to be effective, reliable and reasonably easy to implement, adjust and maintain. Operational protocols for all structures and technologies need to be developed

with input from relevant water management agencies and be made publicly accessible to improve transparency.

The CEWO supports modifying or removing flood work structures that cause adverse impacts, impede flows to ecological assets and across the floodplain and/or impact on connectivity (proposed action 4.4). The potential impacts to downstream connectivity and ecological assets should be considered in approval decisions. The CEWO has previously made submissions on floodplain harvesting (proposed action 4.7), the most recent to NSW's Select Committee Inquiry into floodplain harvesting, which sets out our position. These submissions can be found here:

https://www.dcceew.gov.au/water/cewo/publications under the Floodplain Harvesting heading. It will be critical the NSW government demonstrates in practical terms, perhaps using case studies, how floodplain harvesting will be rigorously measured and monitored to allow effective compliance activities. The CEWO is aware of the compliance challenges of this form of take, which highlights the importance of integrating floodplain harvesting regulation with other rules to protect downstream outcomes.

All sources of water will be important in meeting environmental demands across the entire flow regime and supporting environmental outcomes in the NSW Long-Term Water Plan and Basin Plan. There are also some knowledge gaps for some environmental water requirements in some planning units. Greater clarity and transparency for environmental needs during drought (proposed action 4.5), assessing gaps in the flow regime that are preventing achievement of environmental watering objectives and identifying complementary or cooperative actions to improve ecological outcomes (action 4.6) would be beneficial. Identifying critical environmental needs in the Macquarie region and how to address these during normal operations and extended dry sequences would help support these actions. The CEWO is interested in the findings from the proposed investigations about changes in the management of tributary flows and potential changes in river operations and water sharing plan rules.

The identification of areas of significant riparian, wetland and floodplain habitat and areas to protect and rehabilitate (action 4.8) would help improve river health and complement deliveries of water for the environment. These types of actions would work towards achievement of objectives and outcomes in the Macquarie Long Term Water Plan, the Basin Plan and Basin-wide environmental watering strategy.

5. Other comments

A) Should any proposed actions in this Consultation Paper not be shortlisted and why?

The CEWO is concerned about the proposed action to use the Burrendong flood mitigation zone to augment water supply and the potential conversion of some general security to high security licences. These options may lead to outcomes likely contrary to those sought from other actions listed under the strategy and further information is required on the details of how these actions would occur in practice. Please refer to our responses above. Without further information, the CEWO is not able to support these proposed actions.

B) Should any other options in Attachment 1 of the Consultation Paper be shortlisted and why?

Other Regional Water Strategies included options to increase understanding of water use and water quality in the region. Additional real-time water quality monitoring key parameters such as dissolved oxygen and temperature in the Macquarie would be beneficial during both normal and drought operations and river re-start protocols.

6. Implementation of the Macquarie-Castlereagh Regional Water Strategy

An Implementation Plan will be included in the final Macquarie-Castlereagh Regional Water Strategy.

A) Which actions should be implemented first and why?

All options should be evaluated in terms of their ecological sustainability and economic viability and consider the priorities under the *Water Management Act 2000*. Options that enable environmental outcomes to be achieved from all water sources (e.g. mitigating the impacts of water infrastructure on native fish, improving connectivity) should be a priority and complement each other. These options support achievement of the environmental objectives/outcomes in the water sharing plans, Long-Term Water Plan and Basin Plan.

The CEWO is supportive of the actions identified to enhance participation of Aboriginal people in water management as a high priority. The suite of actions would build capacity, support inclusion and real participation of Aboriginal people in water planning and management. The CEWO also recognises that the Traditional Owners were the first managers of Country and that incorporating their culture and knowledge into management of water in the region is a significant step for closing the gap.

The CEWO is supportive of further development of the following actions as a high priority for the reasons outlined in the submission above in no particular order of priority:

- Mitigate the impacts of water infrastructure on native fish
- Modify or remove barriers to delivering water for the environment and reinstate channel profiles in the southern Macquarie Marshes.
- Assess gaps in the flow regime that are preventing achievement of environmental watering objectives and identify cooperative actions to improve ecological outcomes
- · Provide clarity and certainty for environmental needs during drought
- Identify regionally significant riparian, wetland and floodplain areas to protect or rehabilitate
- Investigate ways to improve connectivity with the Barwon-Darling River on a multi-valley scale
- Fully implement the NSW Floodplain Harvesting Reforms
- Remediate unapproved floodplain structures
- Improve understanding of surface and groundwater systems, modelling, condition and extraction limits
- Enhance Aboriginal participation in water management and initiatives to deliver cultural outcomes for Aboriginal people.

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. www.industry.nsw.gov.au/privacy

7. Information on confidentiality and privacy *

I give permission for my submission to be publicly available on the NSW Department of Planning and Environment website.

Y	'es	No
I	would	like my personal details to be kept confidential
Y	es es	No

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

No	
vide your details below.	
	No ovide 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 D	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)		nd 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 Namoi 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

CLICK HERE TO EMAIL SUBMISSION

Or post to:

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

Submissions close Sunday 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.

