

Draft Regional Water Strategy

Border Rivers

Regional Water Strategies Public Exhibition 2

Submission Questionnaire

(CEWO responses for template – selected free text fields only)

Regional water challenges

- 1 Increased surface water security risks for towns in the region
- 2 Risk of reduced water availability will impact the regional economy
- 3 Dismantling barriers to Aboriginal water rights
- 4 Sustaining the health and resilience of natural ecosystems

Do you agree that these are the priority water challenges for the Border Rivers region that we need to focus on?

Yes No

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

Priority 1: Address knowledge gaps and make information easily accessible

Do you support this action?

1.1 Improve public access to climate information and water availability forecasts

Yes No

1.2 Develop ongoing arrangements for participation of local Aboriginal people in water management

Yes No

1.3 Improve understanding of river flows, water use and water quality at priority locations in the Border Rivers

Yes No

1.4 Invest in continuous improvement in water modelling in the Border Rivers region

Yes No

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

To increase community confidence in water planning, it is important that the best available science and data is used to assess the impacts on water resources. Information should be reviewed periodically and applied and shared with the community and all relevant agencies, including federal and state and territory governments. New information should be accessible to all users with a full description of the assumptions, limitations, goals of the modelling and underlying models and data used. This transparency allows the community to view and use the data with greater confidence.

Using the best available climate information and water availability forecasts requires updating data periodically to improve the accuracy of the data as our understanding increases of climate change impacts increases. The strategy requires a process to incorporate this new data as it becomes available.

As noted in our previous submission, the regional strategy should set out a complete water balance for the catchment under a drying climate that includes further information on the risks to the environment, to basic landholder rights, and to other water uses. It is important to include estimated extraction from all storages including unlicensed works and farm dams, which have an effect on catchment run-off and connectivity. It is important to understand the likely scale of impact on the water balance and all uses of water in the region regardless of a level of uncertainty. Farm dams and other unlicensed works are likely to become more common with a drying climate.

The CEWO strongly support the implementation of new arrangements that enable greater participation of Aboriginal communities in water management and these programs should be delivered as a high priority. 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.

The CEWO is supportive of any increase in knowledge of water quality and water flows and has conducted its own modelling research on discrete areas around the Murray-Darling Basin.

Priority 2: Do more with less water

Do you support this action?

2.1 Support adoption of on-farm water use efficiency measures

Yes No

2.2 Coordinate the management of irrigation water releases and water for the environment to improve ecological outcomes

Yes No

2.3 Identify and address physical barriers to the delivery of water for the environment

Yes No

2.4 Provide clarity and certainty for environmental needs during drought operations

Yes No

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

2.1 Support adoption of on-farm water use efficiency measures

The CEWO supports measures which encourage the adoption of any water use efficiency measures, either on or off farm.

2.2 Coordinate the management of irrigation water releases and water for the environment to improve ecological outcomes

We support coordinated releases of irrigation deliveries and environmental water where environmental water can be used to supplement the flow and achieve environmental outcomes not otherwise possible with environmental water alone. However, for this option to be effective will require a change in practice. One option that the CEWO would welcome is to trial 'piggybacking' of held environmental water on other deliveries and/or natural flow events. This option would be consistent with the co-ordinated water management strategy that is described in the Border Rivers Long-Term Watering Plan as being necessary to meet the objectives for priority environmental assets.

2.3 Identify and address physical barriers to the delivery of water for the environment

Yes No

2.4 Provide clarity and certainty for environmental needs during drought operations

The CEWO supports updating the Border Rivers Incident Response Guide and preparing a Border Rivers Valley Drought Management Plan to clarify when, how and why drought operations are triggered. During extended dry sequences, adequate, transparent and timely management and sharing of water is critical in the Border Rivers and other valleys. Please refer to the previous submission, which outlines our concerns and suggestions regarding drought operational rules and procedures.

The CEWO and its partner agencies have demonstrated the important role that water for the environment plays during drier periods in the northern Basin. While environmental water holders and managers are unable to access entitlements during extreme drought, during dry to moderate conditions, delivery of environmental water along with other forms of water can be important for connectivity, refuge replenishment and native fish outcomes. Examples include the Northern Connectivity Event, Northern Fish Flow and Northern Waterhole Top-up.

The Northern Fish Flow in 2019 which included a release of 7.4 gigalitres (GL) of Commonwealth environmental water from Glenlyon Dam in the Border Rivers during April and May resulted in relatively large losses between Glenlyon Dam and Goondiwindi with only 1.5 GL of water reaching Mungindi. While some of these losses can be attributed to surface evaporation, heavy reliance on groundwater by consumptive users in this area during this dry period would likely have increased the amount of surface water required to recharge alluvial groundwater systems. Further consideration is needed on how relying on groundwater for critical human water needs and town water supply during dry times may impact on environmental water deliveries and surface-groundwater interactions.

The package of options implemented under the regional watering strategy should specifically identify measures to mitigate risks to the health and resilience of the environment during dry times.

Priority 3: Make the region more resilient to climate variability

Do you support this action?

3.1 Increase the availability of high security water access licences

Yes No

3.2 Ensure the water management framework can support sustainable economic diversification

Yes No

3.3 Support place-based initiatives to deliver cultural outcomes for Aboriginal people

Yes No

3.4 Support Aboriginal business opportunities in the Border Rivers region

Yes No

3.5 Mitigate the impact of water infrastructure on native fish

Yes No

3.6 Fully implement the NSW Floodplain Harvesting Policy

Yes No

3.7 Remediate unapproved floodplain structures

Yes No

3.8 Identify significant riparian, wetland or floodplain reaches to protect or rehabilitate

Yes No

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

3.1 Increase the availability of high security water access licences

The CEWO has concerns that the conversion of general security licences into high security licences, particularly the bulk conversion option, may have significant negative impacts on the frequency and magnitude of ecologically important flow events, particularly under a drying climate. We are concerned that if assumptions on future inflows do not adequately represent the variability in water availability, any increase in high security licences would create additional stress on the system.

We also note that the current assessment assumes that the use of the new high security licences is evenly distributed over the year. However, there is likely to be increased utilisation during dry periods, both within and across years. This has the potential to further exacerbate low flow and cease to flow events and the consequential impacts on the environment, particularly in downstream reaches. Any increase to the availability of high security licences would need to be based on detailed supporting evidence that such a change would not result in any impact to the amount of planned environmental water or further reduce the length of water deliveries made along systems (i.e., by only delivering to upper sections of rivers and so decreasing the frequency and connectivity of flows).

The potential impacts of any increase in high security water access licences on the environment with realistic assumptions should be carefully assessed and made publicly available for review. Without further detail on the proposal, the CEWH is not in a position to support the option at this stage.

3.5 Mitigate the impact of water infrastructure on native fish

The CEWO supports the projects to address priority barriers to fish passage in the Border Rivers and Barwon-Darling are proposed through the Northern Basin toolkit. We are also supportive of measures to ameliorate cold water pollution. We note cold water pollution mitigation measures and technologies need to be effective, reliable and reasonably easy to implement, adjust and maintain. Operational protocols need to be developed with input from relevant agencies (e.g., DPIE-EES and DPI Fisheries) and implemented. Please refer to our previous submission for more detail.

3.6 Fully implement the NSW Floodplain Harvesting Policy

The Commonwealth Environmental Water Holder (CEWH) has previously made submissions on floodplain harvesting, the most recent to NSW's Select Committee Inquiry into floodplain harvesting, which sets out our position. 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.

3.7 Remediate unapproved floodplain structures

We support acceleration of this option and consider it a high priority. Options to modify or remove identified priority floodplain structures and barriers that impede delivery of water to priority wetland and floodplain areas can achieve a range of complementary environmental benefits.

3.8 Identify significant riparian, wetland or floodplain reaches to protect or rehabilitate.

We support this option for the identification of areas to protect and rehabilitate to enhance the resilience of the region, noting that the CEWH is responsible for managing the Commonwealth holdings of environmental water to protect and restore the environmental assets of Murray-Darling Basin in the national interest, including rivers, lakes, wetlands and floodplains.

Priority 4: Share water differently to address critical water needs of Border Rivers and downstream users

Do you support this action?

4.1 Map critical drought refugia

Yes No

4.2 Support towns to understand if groundwater can provide a reliable water supply when surface water availability is limited

Yes No

4.3 Investigate innovative projects to support bushfire efforts

Yes No

4.4 Investigate sustainable levels of groundwater extraction in the Border Rivers Alluvium and the Great Artesian Basin aquifers

Yes No

4.5 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?

4.1 Map critical drought refugia

The CEWO supports this action noting that we have funded several habitat mapping projects that could inform this work. Experiences from the technical advisory group established for the Border Rivers as part of the NSW native fish drought response would also help to inform this action.

4.4 Investigate sustainable levels of groundwater extraction in the Border Rivers Alluvium and the Great Artesian Basin aquifers.

Aquifer sustainability, surface water connectivity and groundwater dependant ecosystems will be important considerations. The potential for groundwater extraction in alluvial groundwater systems to impact on surface water management and deliveries of Commonwealth environmental water in the Border Rivers should be considered.

4.5: Investigate ways to improve connectivity with the Barwon–Darling on a multi-valley scale through the Western Regional Water Strategy.

Restoring longitudinal connectivity throughout the catchment is critical for supporting many of the ecosystem functions in the Border and Barwon systems, including improving riverine productivity, water quality, native fish populations and other aquatic animals. Improved connectivity has significant cultural, social and recreational benefits. Protecting and restoring connectivity within and between water dependent ecosystems is an objective of the Basin Plan and an expected outcome of the Basin-wide Environmental Watering Strategy.

There is increasing evidence that unregulated tributaries in the Northern Murray-Darling Basin including the Moonie, Weir, Warrego and Condamine-Balonne Rivers are important source populations for Golden perch (Yellowbelly) at regional and Basin scales. Coordinated water deliveries from the regulated catchments (e.g., Border Rivers and Gwydir) with connecting flows in these unregulated tributaries and the Barwon-Darling will be important to allow native fish to breed, feed and move within and between catchments.

5. Other comments

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

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

Option 21. 'Active management to protect water for the environment in unregulated rivers' should be shortlisted and examined further as a high priority. We recognise that active management only currently applies to HEW, noting that we have unregulated Queensland HEW in the Border Rivers. It is also important to examine the ability of active management to protect some forms of planned environmental water (PEW) when these are released to provide additional flows in downstream systems. We believe there are significant opportunities to 'do more with less water' through broader application of active management and this option should be investigated further. We do not believe that the current scope of active management should limit the investigation of its broader application.

6. Implementation of the Border Rivers Regional Water Strategy

A) Which actions should be implemented first and why?

The CEWO is supportive of the long list of options identified to enhance participation of Aboriginal people in water management and the actions proposed in the short list 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.

We are also supportive of further development of the following actions as a high priority for the reasons outlined above and in our previous submission:

1. Coordinate the management of irrigation water releases and water for the environment to improve ecological outcomes
2. Identify and address physical barriers to the delivery of water for the environment
3. Provide clarity and certainty for environmental needs during drought operations
4. Bringing Flood plain harvesting within water sharing arrangements
5. Mitigate the impact of water infrastructure on native fish
6. Remediate unapproved floodplain structures
7. Identify significant riparian, wetland or floodplain reaches to protect or rehabilitate
8. Map critical drought refugia
9. Investigate ways to improve connectivity with the Barwon-Darling on a multi-valley scale