SUBMISSION BY THE COMMONWEALTH ENVIRONMENTAL WATER OFFICE ON THE

DRAFT BORDER RIVERS REGIONAL WATER STRATEGY

About the Commonwealth Environmental Water Holder

The Commonwealth Environmental Water Holder (CEWH) is a statutory position established under the *Water Act 2007* (Cth). The Water Act gives effect to relevant international agreements on the environment, including the Ramsar Convention for wetlands of international significance, and conventions that protect endangered and migratory species. The CEWH is responsible for managing the Commonwealth holdings of environmental water to protect and restore the environmental assets of Murray-Darling Basin including rivers, lakes, wetlands and floodplains, in the national interest. The CEWH's function is a part of the sustainable management of the Basin's water resources over the long-term for environmental, social, cultural, and economic outcomes. The CEWH is supported by the Commonwealth Environmental Water Office (CEWO).

1. General comments

The CEWO appreciates the opportunity to provide feedback on the draft regional water strategies being prepared by NSW. The CEWO recognises the significance of these regional water strategies in planning for, and balancing, the demands on river systems across NSW for future decades. Some of the options may have environmental benefits and impacts, or both, depending on different flow sequences. Given the CEWO's interest and expertise across the Basin and the statutory responsibilities of the CEWH, we would appreciate the opportunity to be involved in future discussions to help test and refine the regional water strategies and any projects or programs that may arise from them.

This submission focuses on the draft Border Rivers regional water strategy. There is considerable complexity with the Border Rivers, including with respect to cross border issues also involving Queensland. In the Border Rivers, the CEWH manages general security and supplementary entitlement in New South Wales along with medium security and unsupplemented water allocations in Queensland. The CEWO therefore has an interest in both rules for the regulated and unregulated water sources. The arrangements for groundwater systems and interception activities such as floodplain harvesting also affect river health. The CEWO recognises how severe the recent drought has been for communities across the Basin, including in the Border Rivers catchment, and acknowledges that the volume of water in storages in the Border Rivers remains low. The CEWO also recognises 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* and the objectives of the relevant Queensland legislation.

Under normal operating conditions, the *NSW Water Management Act 2000*[1] prioritises water for the riverine environment and basic landholder rights, as noted in Table 2 of the draft Border Rivers regional water strategy. During a severe water shortage, critical human needs are prioritised, followed by the needs of the environment. In the prioritisation process to develop a package of options, the priorities under the *Water Management Act 2000* would be an important consideration – e.g. options that provide for lower priority needs at the expense of higher priority needs would need consideration of appropriate offsets. How the various options are prioritised and packaged will affect the outcomes, including environmental outcomes, along the Border Rivers in Queensland and NSW.

The *Water Management Act 2000* gives a high priority to environmental values. The vision for the regional water strategies includes the need for the delivery of *'healthy, reliable and resilient water resources for a liveable and prosperous region'*. Sustaining healthy rivers, wetlands and floodplains is necessary to have a *'liveable and prosperous region'*. For example, a healthy native fish community in rivers is important for social and cultural outcomes, and ecosystem function is important for maintaining good water quality. The CEWO has an important role in contributing to this vision by protecting and restoring environmental assets to the extent possible given the Commonwealth holdings. The CEWO suggests adding a definition of a 'healthy and resilient environment' to the box of definitions in the regional water strategy. This would give more of a balanced emphasis on the environment, consistent with the *Water Management Act 2000*.

The sequence in which the options are implemented is also an important determinant of the outcomes through time. We suggest that options are implemented in a sequence that is consistent with the *Water Management Act 2000*, with those options contributing to securing critical human water needs and critical environmental needs being implemented first. Provision for critical environmental needs consider Matters of National Environmental Significance, including the needs of endangered species, like silver perch and Murray cod for which the populations in the Border Rivers are particularly important. For transparency and to increase community confidence, independent bodies such as the Natural Resources Commission could be asked to publish advice on whether the packages and sequence of implementation are consistent with the *Water Management Act 2000.*

The CEWO also acknowledges the potential significant connections between the regional water strategies and the Basin Plan, particularly with regard to the protection of planned environmental water. For transparency and clarity, the community may appreciate a clear explanation of the relationship between the NSW regional water strategies and the Commonwealth Basin Plan, which both set a forward agenda for how water is to be managed at a broad scale for multiple outcomes.

1.1. Managing the impacts of a highly variable climate

[1] NSW *Water Management Act 2000* - https://legislation.nsw.gov.au/view/html/inforce/current/act-2000-092

The draft Border Rivers regional water strategy provides new information from NSW on likely climate and water availability changes in the region. This is a significant contribution and important when managing the Commonwealth holdings in a highly variable and changing climate.

Planning and adaptive management

The CEWO water management planning process considers how much water is expected to be available, the seasonal rainfall outlook, and the needs of the environment. The planning process considers options for a range of weather scenarios (from dry to wet) so we can adapt to the seasonal conditions, and changes in environmental demands and water availability. We work with Queensland and NSW water managers and river operators to have water delivered, and to achieve environmental outcomes as efficiently and effectively as possible.

Carryover

Environmental demands and water availability vary between years. The CEWO uses carryover to help meet a range of environmental demands across multiple years. For example, environmental water has been carried over and managed to meet environmental demands in the Border Rivers and Barwon catchments during some drier periods. The northern connectivity event in 2018 and northern fish flow in 2019 are examples of how carryover in the Border Rivers can used to meet environmental demands during dry periods. The ability to access carryover is critical to meeting environmental demands in a variable climate, particularly in dry years where environmental damage can occur. However, there has been times when we could not order water because there was not enough system water to deliver it. If there are risks associated with the delivery of carryover within a particular year, these need to be clearly articulated months in advance to help all water users make informed decisions when planning for the use of their allocated water.

1.2. Current and future challenges

Reduced water availability and ability to maintain environmental assets

The CEWO recognises that NSW is being forward-looking by analysing future climate scenarios in a ground-breaking way. To increase community confidence in water planning, it is important that new climate data and updated modelling are shared with the community and with relevant agencies, including the MDBA and relevant Queensland agencies. There should be an agreed consistent basis for the planning and management of water resources.

Higher temperatures, increased evaporation, changes to rainfall patterns and associated flows, and changes to the intensity and duration of dry and wet periods are all emerging risks to the environment. These risks have the potential to significantly impact water dependent ecosystems and the achievement of environmental water requirements as specified in the Border Rivers Long-Term Watering Plan, the Basin Environmental Watering Strategy, and the Basin Plan.

Some of the options in the regional water strategy that increase the regulation of water, including the proposed Mole River Dam, may exacerbate these impacts and may need to be packaged with offsets that would have counterbalancing environmental benefits. However, it may be possible that some ecologically significant bankfull flows will be eliminated. These usually cannot be replaced by held environmental water and probably would not be replaced by planned environmental water. This could result in environmental disbenefits if the impacts cannot be fully offset.

The potential for reduced water availability due to climate change is concerning for many users of water, including environmental water managers. Any such reductions would have implications for the ability to maintain some environmental assets. This includes the endangered aquatic ecological community in the natural drainage system of the lowland Darling River Aquatic Endangered Ecological Community, which includes the Border Rivers, and is listed under the *NSW Fisheries Management Act 1994*. Strategies for mitigating risks to the environment are required, with the baseline to at least maintain the current level of health and resilience or, ideally, to improve health and resilience.

Within this context is would be helpful for the regional water strategy to 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 estimates of the extraction from unlicensed works and interception activities, such as farm dams, for completeness. Even if there is uncertainty around those figures, it is important to understand the likely scale of impact on the water balance of all uses of water in the region. Such uses are expected to become more significant in light of a drying climate.

Drought operations

During extreme dry conditions, river operators in northern valleys may use a range of practices such as ceasing deliveries beyond a certain point in the river, block releases and dam wall debiting. These practices reduce connectivity, impacting upon aquatic animals and river and wetland health. They can also have profound social and cultural implications. These practices should only be used occasionally and during extreme circumstances and not become more standard operational practice in the pursuit of system efficiencies, particularly if they are implemented so that any savings are provided for lower priority uses under the *Water Management Act 2000.*

The process of re-starting rivers after dry times or cease-to-flow conditions needs to be carefully managed regardless of the water source. We note that information on changes to cease-to-flow are not provided for the Border Rivers on figures 18 and 19. These cease-to-flow data are provided in the Macquarie and Gwydir regional water strategies. If this information is available for the Border Rivers then it is requested that it also is made available, as cease-to-flow events can present considerable environmental risk. Protocols that guide the best way to re-start flows in the river to minimize risks (e.g. water quality, fish death) and conditions (stratification, leaf litter) should be developed with advice from

relevant agencies and experts (including DPIE-EES, DPI Fisheries, the CEWO). At the time of writing, there are risks associated with re-starting flows in the Dumaresq River.

If the climate changes consistently with predictions, storage management (e.g. period and volume for essential supplies) and allocation processes may need to be reviewed and modified to reduce the risk of drought operation practices such as block releases becoming implemented more often. Striking the balance between providing water allocations now and the risk of more frequent occurrence of stage 3 and stage 4 under the NSW Extreme Events Policy in the future is important – all water users should be involved in this discussion.

Connectivity

Improving river connectivity within the Border Rivers, and between the Border Rivers and the Barwon-Darling, is important for achieving environmental outcomes. Water resource development and changing rainfall and inflow patterns have already impacted connectivity between the Border and Barwon rivers. However, under the climate predictions, reduced water availability and inflows may exacerbate reductions in connectivity. We would be concerned if any of the options to "address inefficient delivery system management" resulted in a reduction of the frequency of supplementary flow events, which provide a 25% environmental share. This may reduce planned environmental water and be inconsistent with the Basin Plan. Investigating strategies such as option 23 (connectivity with downstream systems) will be important in maintaining and improving connectivity with the Barwon River. It may be possible to package up options that provide an adequate level of river connectivity for resilience and health while achieving other benefits. Water from Queensland tributaries of the Border Rivers and the Barwon can provide significant flow contributions.

Connectivity should be considered across multiple regional water strategies in the northern basin. For the Barwon-Darling to be healthy and resilient, the contribution of each tributary to the Barwon-Darling should have some proportionality to the natural distribution, and there should be enough flow in the Barwon-Darling with an appropriate temporal distribution.

Operation and maintenance of existing and new infrastructure

To maximise the effectiveness of all water sources to meet environmental water requirements in the Long-Term Watering Plan and the outcomes in the Basin Plan, existing infrastructure such as fishways, regulators and cold water pollution mitigation measures (e.g. thermal curtain, multi-level offtakes) must be operated appropriately, regularly maintained and fixed in a timely manner. Operational protocols for infrastructure should be developed with input from relevant agencies such as DPIE-EES, DPI Fisheries, DPIE-Water, environmental water managers, and relevant experts. These protocols should made publicly available to increase transparency. The effectiveness of the infrastructure and operation should be reviewed to ensure they are meeting their objectives (i.e. fish passage, mitigation of cold-water pollution) and identify whether improvements can be made.

The regional water strategy does not indicate who would be responsible for the operation and maintenance costs associated with the proposed water security measures, particularly the Mole River Dam. We would welcome further information on the likely operating and maintenance costs associated with these options and the implications for water users in the catchment. Without this information it is difficult to weigh up the potential benefits and costs associate with the water security measures.

Accountability and transparency

Improved accountability and transparency would be supported by making the following information and documents publicly available:

- Explanation of resource availability scenarios and allocation processes and associated risks for different licence types, particularly under future climate scenarios.
- Any WaterNSW environmental water management plan(s) or procedures for river operations in each valley (management of rise and falls of releases; water quality risks; river restart procedures etc).
- Operational protocols and procedures for infrastructure such as various fishways, the Mungindi weir if enlarged; cold water pollution mitigation measures.
- Reasonable use guidelines for the take of stock and domestic water and basic landholder rights.

2. Comments on options

Consistency with the Basin Plan

Management of water resources across the Murray-Darling Basin must be consistent with the Basin Plan. We expect that any new option implemented under the regional water strategy would also be subject to the requirements of the Basin Plan. Options that involve changes to water resource plans are likely to require accreditation by the Murray-Darling Basin Authority. New infrastructure or rules will need to ensure extraction is kept within Sustainable Diversion Limits[2] and protect the effectiveness of planned environmental water. Improvements in reliability of supply may need to be offset to be compliant with the Sustainable Diversion Limits. Packaging of options will likely be required to achieve the outcomes envisioned by the regional water strategy without compromising the overarching Basin Plan objectives.

Environmental benefits and impacts

Some options may result in environmental benefits, and some could result in impacts. In general, options that lead to changes or reductions in river flows may compromise the achievement of environmental water requirements in the Long-Term Watering Plan, and outcomes in the Basin Environmental Watering Strategy. Potential impacts of the proposed options on Matters of National Environmental Significance, such as threatened and

[2] MDBA submission on infrastructure.
https://www.parliament.nsw.gov.au/lcdocs/submissions/69285/0125%20Murray%20Darling%20Basin%20Authority.pdf

migratory species, would need to be assessed in accordance with the *Environment Protection and Biodiversity Conservation Act 1999* in addition to any requirements under relevant NSW environmental legislation such as the *Biodiversity Conservation Act 2016*.

Options that result in increased reliance on groundwater may impact on groundwater levels, recharge rates and ongoing sustainability of groundwater resources. These impacts may be further exacerbated under climate change with predictions of less rainfall, runoff, and greater persistence of dry conditions. Increased use of groundwater may impact on groundwater dependent ecosystems, river flows and wetlands. This may increase environmental demands in river and wetland systems and the volume of water required to meet those demands. Further consideration of groundwater options should be informed by additional work on the sustainability of groundwater systems, such as options 35 to 37.

Feedback on specific options

The CEWO supports the following options as a high priority for further investigation:

- 10. NSW Fish Passage Strategy
- 11. Diversion screens to prevent fish extraction at pump offtakes
- 12. Cold water pollution mitigation measures
- 13. Investigation of surface water quality mitigation measures
- 15. Modification and/or removal of existing priority floodwork structures causing adverse impacts
- 19. Revise water sharing plan provisions for planned environmental water
- 20. Improve benefits of planned environmental water
- 21. Active management to protect water for the environment in unregulated rivers
- 23. Improve connectivity for downstream systems

The CEWO is particularly interested in, and possibly concerned about, the potential environmental impacts of the following options:

- 1. Building a new dam on the Mole River
- 2. Raising Pindari Dam's full supply level
- 3. Raising Mungindi Weir
- 5. Improve cross-border management of flows at major breakout points

While the CEWO does not reject these options outright, they could reduce the volume of water that reaches the most valuable environmental assets in the Border Rivers system or the Barwon River and, depending on how they are operated, may not achieve the same or better environmental outcomes.

More detailed comments on specific options are provided in Attachment 1. While the comments in Attachment 1 are provided on individual options, when implemented together

as a package the final suite of selected options may in combination provide a range of positive cultural, economic, social and environmental outcomes. The CEWO would appreciate being part of ongoing discussions regarding the options that are selected for implementation under the Border Rivers regional water strategy, presumably with Queensland agencies and possibly with the Border Rivers Commission.

Attachment 1. Comments on the Long list of options and government commitments in the draft Border Rivers regional watering strategy

Many of the options below would require support from Queensland. We assume that these options have been or will be discussed with relevant Queensland agencies, including through the Border Rivers Commission.

Option	Comments
1. Final business case for building a new dam on the Mole River	The CEWO notes that the possible Mole River Dam will be subject to an environmental impact statement. Some considerations for the environmental impact statement should include: • The system is part of the lowland catchment of the Darling River that is listed under the *NSW Fisheries Management Act 1994*. • The presence of a dam on the Mole River would affect fish movement, possibly including that of nationally endangered fish species such as silver perch and Murray cod. • The dam could affect the temperature regime, and the downstream passage of sediment and nutrients. • Whether the aggregated effect of capturing flows in wetter sequences and releasing the water in drier sequences is good for the environment[3]. • The magnitude of evaporation from the storage, which would reduce the volume of river flows. Operation of a large dam on the upper Mole River would impact the flow regime (e.g. size, variability, frequency, seasonality, and timing of flows) of the Mole River and downstream to the Dumaresq, Macintyre and Barwon-Darling rivers. Currently, the Mole River helps provide some more natural variability in the Dumaresq River and downstream into the Macintyre and Barwon-Darling rivers. We would welcome further information on how planned environmental water requirements would be met if the Mole River Dam were constructed and operated. For example, at present, the Dumaresq River has ceased to flow: would stored water from the dam be available to re-start the Dumaresq and would its release from storage be approved? We would also welcome further information on how this option will not impact negatively on the reliability of Commonwealth unsupplemented water licences, and other downstream unsupplemented (Queensland) and supplementary licence holders. The Border Rivers Intergovernmental Agreement preserve a portion of all unregulated flow events through the 25% environmental share and end of system flow requirement of at least 60.8% of the pre-development flow pattern. Would unregulated flow events be reduced by the proposed dam? An important matter for resolution prior to a decision on whether to proceed with the dam is who pays for operational and maintenance costs – would some of these costs be borne by Queensland water users?

[3] https://www.waternsw.com.au/projects/new-dams-for-nsw/mole-river-dam

Option	Comments
2. Raising Pindari Dam's full supply level	Increasing the height of the Pindari Dam embankment to improve capture of high flow events will result in significant changes to the downstream environment. This option may result in greater connectivity and longevity of river flows in dry years (contingent on how additional water is shared) but there may be impacts in moderate and wetter years. Our experience is that moderate to high flows during wetter years are critical to help ensure life cycle requirements of native environmental flora and fauna are met. Raising the full supply level of Pindari Dam to provide additional volumes of water to increase allocations will need to be assessed against the Sustainable Diversion Limits and the Basin Plan more broadly. Any changes to the volume of water held and operational releases may impact on the volume of planned environmental water and increase cold water pollution. We would welcome further information, such as hydrological modelling, on the resulting changes to the flow regime associated with the option.
3. Raising Mungindi Weir	The Mungindi Weir is a significant barrier to fish movement, reducing the movement of fish in the important corridor from the Border Rivers into the Barwon-Darling. Enlargement of the weir presents an opportunity to address fish passage issues in a key section of the upper Barwon system. Additionally, there may be some occasions when the urgency of providing water to meet a critical environmental need in the Barwon River downstream of Mungindi means that it would be better to release water from Mungindi than Pindari Dam (or Glenlyon Dam). However, depending on how it is operated, an enlarged Mungindi weir could negatively impact on the environment. The weir may lead to a reduction to small unregulated flows and changes to river flows in the Barwon River. Reductions and changes in river flows may compromise the achievement of environmental water requirements in the Long-Term Watering Plan for the Border Rivers and Barwon-Darling. Operation of the proposed weir could detrimentally impact connectivity and fish passage. The end-of-system flow rules preserve a portion of all unregulated flow events and are the base upon which held environmental water is delivered upon to achieve the intended environmental outcomes of the Basin environmental watering plan. The impacts of the weir would need to be assessed in an environmental impact statement, and the pros and cons assessed. Any impacts on planned environmental water, reliability and potential growth in use should be considered.

Option	Comments
4. Piping water to stock and domestic water users in the unregulated section of Boomi River	There may be co-benefits realized if the flows to the river system and other connected water sources are maintained or improved because less water is needed to meet the needs of Boomi. As it stands, the Boomi replenishment flow is an important source of water for environmental assets within the Border Rivers regulated water source along the Boomi River and in the system above that point, but this has not been acknowledged within the draft Border Rivers water resource plan as planned environmental water. Retaining the connectivity and longevity of flows within the Border Rivers upstream should be a key criterion in assessing the risks and benefits of any project of this nature. If the stock and domestic water replenishment flow for the Boomi River was removed or reduced this would reduce flows in the river system and will likely put environmental assets and outcomes in this system at increased risk. Where piping of stock and domestic water has been used in other systems with support of funding from NSW and/or Commonwealth government, licences for the environment have been created and these have been able to be used to appropriately support the ecological health in the system. Since there is still a shortfall in recovery volumes in the NSW Border Rivers as required under the Basin Plan, any savings ought to be directed towards bridging the gap in the first instance.
10. NSW Fish Passage Strategy	We are supportive of further development of this option and consider it a high priority. Providing effective fish passage for all life stages is critically important to improve native fish populations in the Basin. Addressing barriers to fish passage through the Border Rivers would improve the ability to achieve outcomes for native fish from environmental water deliveries and other flows. We note that there has been little progress on fishways in the northern Basin in the last four years despite there being some outstanding obligations for NSW to construct fishways as part of several dam safety upgrades. Some of these obligations have existed for several years. Fishways need to be operated appropriately and maintained to ensure they are effective in providing fish passage. Across the northern Basin there are several examples of fishways not being used or where there have been significant delays in undertaking repairs. Providing fish passage should be a high priority.
11. Diversion screens to prevent fish extraction at pump offtakes	We are supportive of further development of this option and consider it a high priority. Diversion screens would reduce the loss of native fish from waterways and improve the ability to achieve environmental outcomes for native fish from environmental water deliveries and other flows.

Option	Comments
12. Cold water pollution mitigation measures	Options to ameliorate cold water pollution released in the Border Rivers are a high priority. This would improve riverine productivity, and support population recovery of native fish and other aquatic animals. It would improve outcomes for native fish from all water deliveries including water for the environment. 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.
13. Investigation of surface water quality mitigation measures	We are supportive of further development of this option. Real-time water quality monitoring key parameters such as dissolved oxygen and temperature would be beneficial during both normal and drought operations and river re-start protocols. Options for improving water quality both within storages (e.g. mixing, bubblers, or other options) and released from storages should be considered in these options and may link with cold water pollution mitigation (e.g. option 12).
15. Modification and/or removal of existing priority floodwork structures causing adverse impacts	We are supportive of further development 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.
19. Revise water sharing plan provisions for planned environmental water 20. Improve benefits of planned environmental water	We are supportive of further development of this option as a high priority. Extending the protection of stimulus flow releases as far as the junction of the Dumaresq and Macintyre Rivers and providing for releases to occur outside existing timeframes are welcome amendments to the draft regulated water sharing plan. These amendments will enable a greater range and downstream extent of in-stream benefits as well as more efficient use of held environmental water to complement stimulus flow releases. Whether there is any potential to revise and improve the rules to achieve better environmental outcomes warrants further exploration.

Option	Comments
21. Active management to protect water for the environment in unregulated rivers 23. Improve connectivity with downstream systems	We are supportive of further development of this option as a high priority. Currently active management is only applied to held environmental water and in a small number of rivers. It would be good to expand the geographic scope and the ability of active management to protect some forms of planned environmental water. This is particularly important in the Border rivers, both because of the relatively low volumes of held environmental water and the high ecological needs within this river system and downstream. 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. The strategic use of held environmental water includes the ability to 'piggyback' or to follow on with its delivery onto natural flow events. More flexible operations 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.
22. Improve understanding of water use in unregulated water sources	We are supportive of further development of this option as it would improve information available for decision making and assist with cross-border discussions.

Option	Comments
29. New drought operational rules	During extended dry sequences, adequate, transparent and timely management and sharing of water is critical in the Border Rivers and other valleys. We would be concerned if drought operations became more standard practice, such as: • ceasing deliveries beyond certain points of the river; • dam wall debiting; and • block releases with rivers being stopped more often and the associated environmental risks of re-starting rivers (e.g. fish death events). Options such as storage management and allocation processes may need to be reviewed and modified to reduce the risk of drought operation practices becoming more common under the climate predictions. Any new drought operational rules and procedures need to: • clearly identify both critical human and environmental needs within the Border Rivers; • identify how these needs will be addressed during extended dry sequences, including how holdings of essential supplies in dams may need to be increased to cover longer dry phases; • be clear and transparent; • assess the potential impacts to the environment; • address how tributary flows and first flush events will be managed; • address processes and strategies for restarting rivers; and • ensure these practices are only used during extreme circumstances; • identify the impacts of any new drought operation rules on the Basin Plan, Sustainable Diversion Limits, water sharing plans, planned environmental water and licence holders. The package of options implemented under the regional water strategy should specifically identify measures to mitigate risks to the health and resilience of the environment during dry times.

Option	Comments
42. Culturally appropriate water knowledge program 43. Water-dependent cultural practices and site identification project 44. Secure flows for water-dependent cultural sites 45. Shared benefit project (environment and cultural outcomes) 46. Establish a regional Aboriginal Water Advisory Committee 47. Water portfolio project for Aboriginal communities 48. Aboriginal cultural water access licence review 50. Regional Cultural Water Officer Employment Program 51. River Ranger Program	The CEWO is seeking increased opportunities to work with Aboriginal communities in the Border Rivers. The CEWO has appreciated opportunities to engage with the Toomelah and Mungindi communities, for example. We are supportive of further development of these options, acknowledging the importance of connecting with communities in NSW and Queensland. We acknowledge the Traditional Owners and their Nations have deep cultural, social, environmental, spiritual and economic connection 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. The CEWO supports improving recognition of Aboriginal people's water rights, interests and access to water. The suite of proposed options would build capacity, support inclusion and real participation of Aboriginal people in water planning and management. Improved understanding of cultural values and traditional ecological knowledge would improve the ability of environmental water managers and river operators to support cultural values and sites with a range of water deliveries. Options that provide access to cultural licences would enable Aboriginal communities to directly manage water to support their values and sites. The Commonwealth holdings are to protect and restore environmental assets, particularly those subject to international agreements but can have regard for Aboriginal cultural values. The CEWO would be willing to work with a water advisory committee, should it be formed. This would enhance the ability of the CEWO to have regard for Aboriginal cultural values and achieve complementary cultural outcomes. An Aboriginal River Ranger Program could provide numerous environmental and community benefits. For example, improving the health of rivers, lagoons and riparian areas, wetlands and floodplains and recovery of Country. An Aboriginal River Ranger Program is also likely to complement other river repair activities in the catchment and outcomes from the use of water for the environment. Ensuring the Program is sustainable with a source of funding will be important to continued implementation and success of the program. There is a need to implement programs that allow greater participation of Aboriginal communities in water management. These programs should be delivered as a high priority.