



Natural
Resources
Commission

*Overview of findings and
recommendations of the*

***Review of the Water
Sharing Plans for the
Lachlan unregulated and
Belubula regulated river
water sources 2012***

This slide pack provides an overview of the Commission's review and should not be taken as our advice regarding the Lachlan unregulated and Belubula regulated plan review. The Commission's official advice and full recommendations for the plan are available via our website – <https://www.nrc.nsw.gov.au/wsp-reviews>

Acknowledgement of Country

The Natural Resources Commission acknowledges and pays respect to Traditional Owners and Aboriginal peoples in the Lachlan and Belubula catchments, including the Barkandji Traditional Owners and the active native title claim of the Ngemba, Ngiyampaa, Wangaapuwan and Wayilwan people.

The Commission recognises and acknowledges that traditional owners have a deep cultural, social, environmental, spiritual and economic connection to their lands and waters. We value and respect their knowledge in natural resource management and the ongoing contributions of many generations to this understanding and connection.

The Commission also recognises and pays respects to all Aboriginal peoples for whom the waterways of the Lachlan and Belubula catchment are significant.

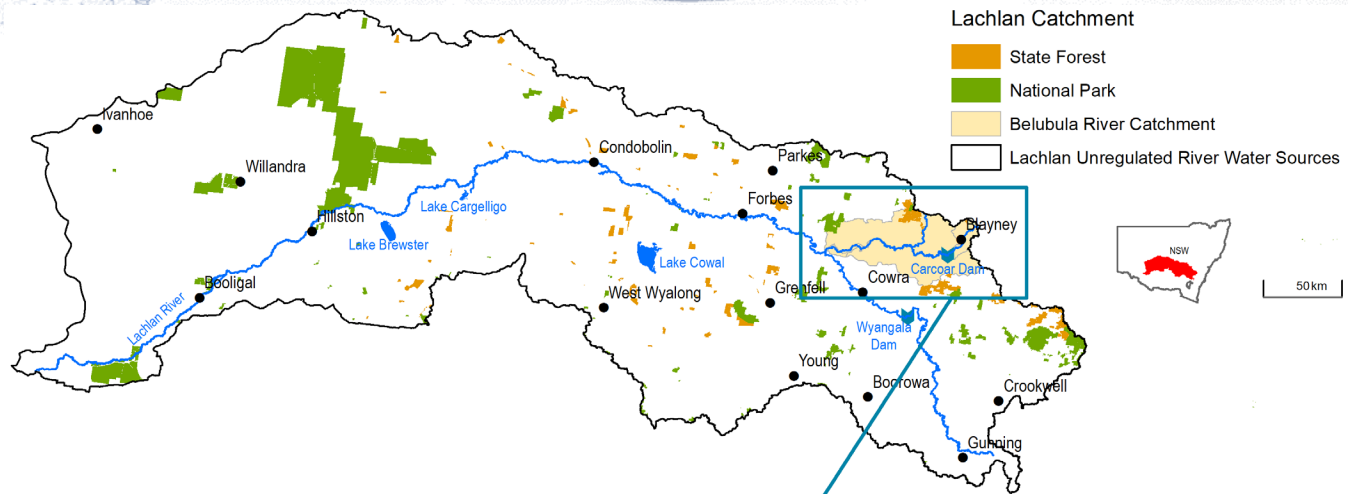
Our review

- The Natural Resources Commission has a statutory role to review water sharing plans approaching their 10-year expiry
- Our review considered evidence provided via public submissions, stakeholder consultation, technical advice and document review as well as other relevant State-wide and regional government policies or agreements that applied
- Our review evaluated if the plans' provisions adequately contributed to achievement of environmental, social, cultural and economic outcomes and identified where improvements can be made
- Finally, our review recommended whether the plan should be extended as is or replaced with an improved plan

Our review

- The Commission combined the review of the Lachlan unregulated and Belubula regulated plans to:
 - allow for the consideration of all surface water sources in the Belubula catchment which is currently split across the Lachlan unregulated and Belubula regulated plans
 - determine the interaction of provisions between the two plans including end of system flows
- This approach recognises the following:
 - the Belubula Regulated river obtains 90 percent of inflows downstream of Carcoar Dam, operating more like an unregulated river
 - the limitations of Carcoar Dam in regulating downstream flows

Lachlan unregulated and Belubula regulated water sharing plan areas



Water Sharing Plan for the Belubula Regulated River Water Source 2012

Belubula River Catchment



Overview of plan areas

- The Lachlan catchment supports extensive forest areas in the upper reaches, grassy woodlands in the lower slopes and plains, and floodplain woodlands and wetlands in the western end of the catchment
- The Belubula regulated river flows 165km from its headwater (Carcoar Dam) to its junction with the Lachlan regulated river
- The Belubula regulated plan is a sub-catchment of the Lachlan catchment
- Water dependent industries across the plans include mining and agriculture
- Significant environmental sites across the plans include Lake Cowal, the Booligal wetlands, the Great Cumbung Swamp, Lake Waljeers and Lake Forbes

Overview of plan areas

- Major regional centres include Cowra, Forbes, Parkes and Young with over 111,000 people residing across the Lachlan and Belubula catchments. These regional centres are not dependent on the regulated plan for their water supply
- Smaller towns such as Blayney, Canowindra, Gunning and the Weddin Shire are reliant on water supplied by the unregulated plan to meet their town water supply requirements

Overall recommendation

- There are material risks to the achievement of environmental, social and cultural outcomes and economic outcomes.
- The plans should be improved based on the Commission's recommendations and replaced by 1 July 2025.

Recommendation options available under s43A of the <i>Water Management Act 2000</i>	
Extend existing plan for 10 years	
Improve and replace plan within 2 years	⊗



Actions for plan replacement

- The Commission has identified key issues that should be addressed in the plans' replacement processes to improve environmental, social, cultural and economic outcomes
- The following slides summarise these issues and the actions that should be undertaken by DPE Water to improve the plans' outcomes
- Full recommendations made by the Commission to be considered by DPE Water in the plans' replacement processes are included in our public report available on our website



**Issues and improvements
identified for the Lachlan
unregulated plan**

Improve water management against extraction limits

Key issues

- The plan lacks sustainable, numerically defined long-term average annual extraction limits (LTAAELs)
- Limited data on current water use
- Available water determinations (AWDs) have been set to 100 percent for all licences despite risk of over extraction and lack of LTAAEL compliance
- A lack of LTAAEL assessment and AWD adjustment risks overextraction and potentially impacts river resilience
- Lack of distinct extraction management units limits the ability to manage different extraction risks across the plan

Recommended actions for DPE-Water

- Establish sustainable, fixed numeric LTAAELs based on best available information including all forms of extraction, ecological requirements, hydrological and climate information
- Define the plan's LTAAEL for each extraction management unit
- Undertake LTAAEL compliance and adjust AWDs as required
- Develop provisions to manage impacts of take in the floodplain areas of the plan
- Apply a conservative AWD until compliance is completed
- Review estimated take by basic landholder rights and include provisions to account for establishment of water take under Native Title rights

Strengthen protection of water for the environment

Key issues

- Gauging stations within the plan area have not been utilised to generate flow-based water access rules
- Plan provisions do not adequately protect significant assets including Lake Cowal and floodplain habitats
- Lack of clarity on the volume of water that is required to meet replenishment flows, and the adequacy of current replenishment flow volumes given projected climate change

Recommended actions for DPE-Water

- Utilise current hydrometric network to establish flow-based access rules to reduce pressure on the river during low flow periods and provide for periodic higher flows
- Prioritise reassessment of access rules for at risk assets including Mandagery Creek
- Change access rules of the Belubula Tributaries Below Carcoar Dam Water Source to improve contribution of flows to the Belubula regulated plan end of system targets
- Include all significant wetlands in the Plan schedules
- Determine if provisions for Lake Waljeers and Lake Forbes adequately protect Aboriginal and environmental values and phase out pool drawdown if required
- Clarify volumes of replenishment flows required to meet stock and domestic and environment requirements and codify provisions to protect these flows
- Develop end of system flow targets for effluent streams supporting high value water dependent assets
- Prevent obstruction, diversion and extraction of environmental flows from the Lachlan regulated plan by users from the unregulated plan

Secure town water supply to meet future needs

Key issues

- Central Tablelands water sits in the Belubula catchment
- Crookwell, Gunning, Boorowa and other towns supplied by Central Tablelands Water rely partially or fully on water from the Lachlan unregulated plan
- Climate change may make these towns dependent on water from unregulated rivers more exposed to water security risks
- Access rules may not protect adequate town water in the Upper Lachlan catchment due to growth in unregulated entitlement and use and water taken under basic landholder rights

Recommended actions for DPE-Water

- Review adequacy of flow classes and access rules to protect water for town water supply



**Issues and improvements
identified for the Belubula
regulated plan**

Improve water management against extraction limits

Key issues

- Belubula regulated plan functions more like an unregulated system as 90 percent of inflows into the regulated river occur in downstream of Carcoar Dam
- The plan has two different long-term average annual extraction limits (LTAAEL) definitions, both of which are not numerically defined, and one of these LTAAELs has not yet been calculated or modelled
- Complex plan rules create difficulties in accounting for extraction in the regulated Belubula plan area
- Mining operations can take more than 10 percent harvestable rights due to exemptions under the *Water Management (General) Regulation 2018*. This could mask total harvestable rights take by mining operations. Figures indicate substantial growth in harvestable rights take by mines in the plan

Recommended actions for DPE-Water

- Consider merging the Belubula regulated plan in to the Lachlan unregulated plan to allow for simplified, targeted and equitable plan provisions
- Generate one LTAAEL for the Belubula catchment to improve efficiency and transparency
- Establish a sustainable, fixed numeric LTAAEL based on best available information including all forms of extraction, ecological requirements, hydrological and climate information
- Simplify provisions for uncontrolled and supplementary flow access to ensure take can be accounted for and provide for equitable water sharing
- Review and provide for requirements of basic landholder rights and native title rights
- Clearer reporting and itemising all forms of water take by mining operations in the plan will be required to enable LTAAEL compliance assessments


Strengthen protection of water for the environment

Key issues

- Suitable access rules are required to ensure that end of system flow targets in the Belubula catchment can be met

Recommended actions for DPE-Water

- Review the implications of extraction from Flyers Creek on environmental release rules for the plan
- Based on this review determine any associated updates required to reserves held in Carcoar Dam and uncontrolled and supplementary access rules



**Common issues and
improvements identified for
the Lachlan unregulated
Belubula regulated plan**

Improve outcomes through trade

Key issues

- Current trading rules are complicated and highly restrictive
- New data indicates that water sources may have lower instream values that can allow for the expansion of trade in the plan without compromising environmental values

Recommended actions for DPE-Water

- Review and revise access licence dealing provisions in the Lachlan unregulated plan based on hydrologic stress, entitlement volumes, connectivity, HEVAE mapping and cultural assets and values
- Ensure that any changes to the Belubula regulated plan provisions do not result in unintended consequences of flexibility of trade

Improve outcomes for Aboriginal people

Key issues

- Lack of proactive involvement of Aboriginal people in the determination of Aboriginal value and rights for the purpose of water planning and management
- No protection of known Aboriginal high value water dependent cultural assets
- Limitations on use of water by Aboriginal people
- Controlled allocations have been issued without evidence of Aboriginal water rights being considered
- Native Title determination for Barkandji Traditional Owners is listed in the plan. Active Native Title claim submitted by Ngemba, Ngiyampaa, Wangaapuwan and Wayilwan Traditional Owners not acknowledged

Recommended actions for DPE-Water

- Include registered Native Title claims
- Consult with Aboriginal stakeholders to facilitate water access rights required to meet cultural and economic uses
- Identify and protect high value water dependent cultural assets
- Controlled allocations to be prioritised for cultural water use
- Do not restrict cultural access licences to 10ML per application
- Ensure plan is consistent with the NSW water strategy relating to Aboriginal people's rights and values and access and ownership of water



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