



Natural
Resources
Commission

*Overview of findings and
recommendations of the*

**Review of the Water
Sharing Plan for the
Murrumbidgee Unregulated
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 Murrumbidgee Unregulated WSP 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 of the Plan area including the Barapa Barapa, Mutthi Mutthi, Nari Nari, Ngunnawal/Ngunawal, Ngambri, Ngarigu, Nyeri Nyeri, Wadi Wadi, Wolgalu, Wemba Wemba, Weki Weki and Wiradjuri peoples.

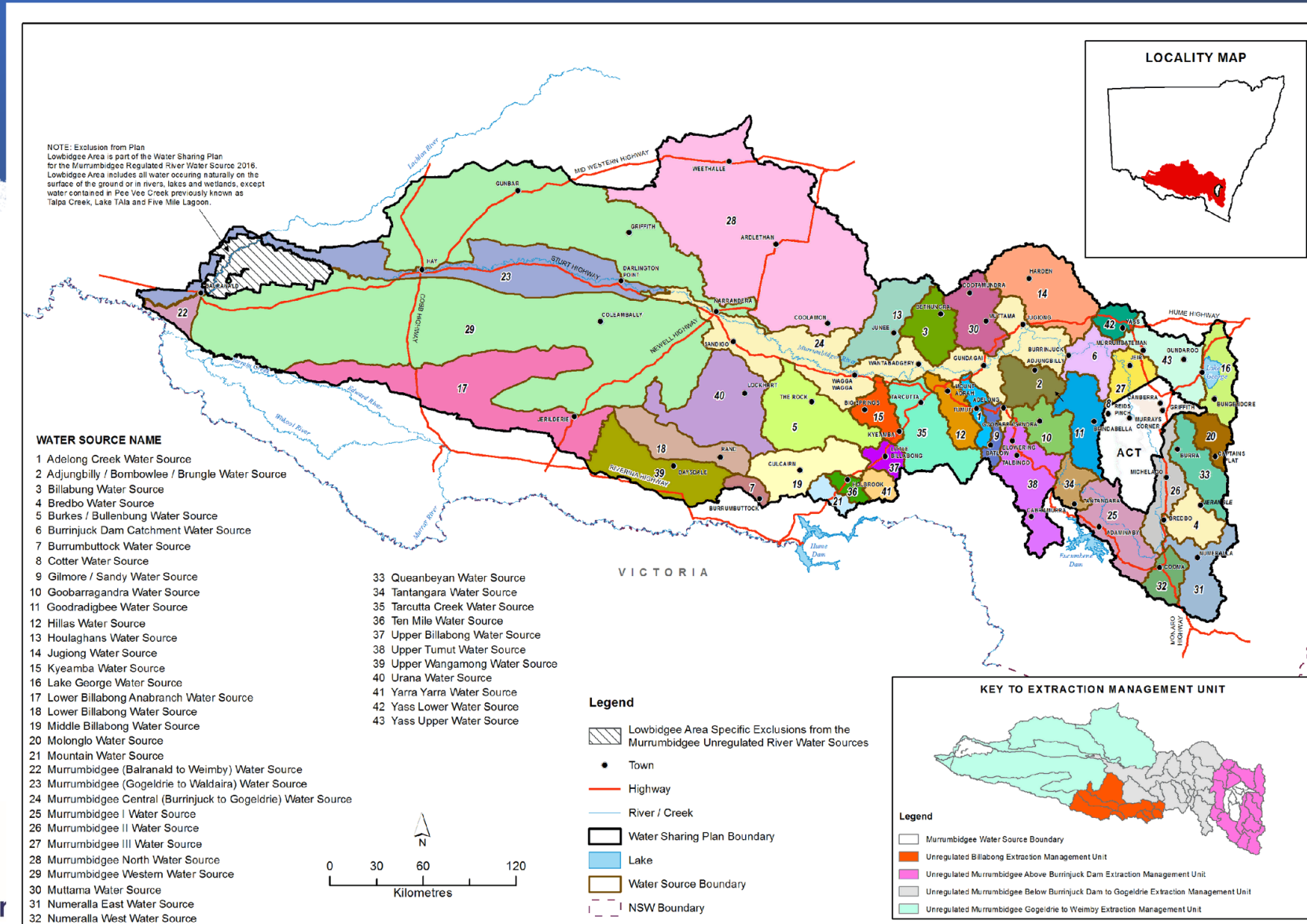
The Commission recognises and acknowledges that Traditional Owners have a deep cultural, social, environmental, spiritual and economic connection to their lands and waters. We value and respect their knowledge in natural resource management and the ongoing contributions of many generations to this understanding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

The Commission also recognises and pays respects to all Aboriginal peoples for whom these waterways are significant.

Our review

- The Natural Resources Commission has a statutory role to review water sharing plans approaching their 10-year expiry
- Our review of the Plan considered evidence provided via public submissions, stakeholder consultation, technical advice and document reviews as well as other relevant State-wide and regional government policies or agreements that applied
- Our review evaluated if the plan's environmental, social, cultural and economic outcomes had been achieved 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

Murrumbidgee unregulated water sharing plan



Overview of plan area

- The Plan comprises 43 water sources across four extraction management units (EMUs)
- Unregulated river water sources of the Plan area interact with the regulated Murrumbidgee River (which is covered by a separate water sharing plan)
- The upper Murrumbidgee River flows through the ACT, before returning to NSW downstream
- The plan area transitions from alpine streams with headwaters in Kosciuszko National Park to expansive floodplain wetlands. Ramsar listed wetlands (Fivebough and Tuckerbil Swamp) and 26 nationally significant wetlands are in the Plan area.
- The Murrumbidgee region has a diverse economy and is NSW's fourth largest in terms of economic output, population and employment. Key sectors include tourism, power generation, agriculture, and manufacturing
- Snowy Hydro dams for hydropower generation are located on the upper Murrumbidgee River and Tumut rivers. Town water supply dams are also located in the Plan area.

Overall recommendation

- The review found there are material risks to the achievement of environmental, social and cultural outcomes and economic outcomes
- The plan 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 plan replacement to improve environmental, social, cultural and economic outcomes
- The following slides summarises these issues and actions that should be taken by DPE Water to improve plan outcomes
- Full recommendations are available in the Commission's public report available on our website

Improve water management against extraction limits

Key issues

- The plan lacks sustainable, numerically defined long-term average annual extraction limits (LTAAELs)
- Available water determinations (AWDs) have been set to 100 percent for all licences
- A lack of LTAAEL assessment and AWD adjustment risks overextraction and potentially impacts river resilience
- Basic landholder rights have increased since plan development
- The Murrumbidgee catchment is highly vulnerable to climate change. Plan provisions – including LTAAELs – could better support the resilience of the Plan's water sources if strengthened and implemented.

Recommended actions for DPE-Water

- Establish and include numeric values for LTAAELs in the replacement Plan, based on up-to-date information on all forms of extraction
- Determine whether floodplain harvesting works have been constructed in the Plan area and potential implications for Plan area extraction.
- Undertake LTAAEL compliance and adjust AWDs as required
- Apply a conservative AWD until compliance is completed
- Determine the rate of growth in interception activities and the impact of this estimated growth on licenced users
- Determine the sustainable level of extraction by Year 5 of the replacement Plan based on best available ecological requirements, hydrological and climate information and amend the Plan's LTAAELs for each extraction management unit.

Protecting upper Murrumbidgee flows

Key issues

- The upper Murrumbidgee River has a highly altered flow regime with the Snowy Scheme's Tantangara Dam impacting environmental, social and Aboriginal cultural values
- Environmental releases (Snowy and Montane River Increased Flows releases) made from Tantangara Dam consistent with the *Snowy Water Inquiry Outcomes Implementation Deed* are not currently protected from extraction by the Plan
- Protecting these flows is critical to improve environmental outcomes in the upper Murrumbidgee River, particularly given pressures from climate change, the energy market and potential population growth

Recommended actions for DPE-Water

- Ensure provisions in the replacement Plan adequately protect Tantangara Dam environmental releases from extraction
- Revise access rules to adequately protect basic landholder rights and town water needs
- If during the term of replacement Plan, rules for protecting environmental, basic landholder rights and town water needs are considered insufficient, investigate opportunities to reduce Plan entitlement and the extraction limit for the Unregulated Murrumbidgee Above Burrinjuck Dam EMU
- During the term of the replacement Plan, investigate risks to the environment associated with carryover provisions for unregulated river access licences in the upper Murrumbidgee water sources

Strengthening environmental protections

Key issues

- The Plan does not adequately consider the interactions between unregulated river water sources and the regulated Murrumbidgee River water sharing plan
- Critical flows from the regulated river for protecting environmental and cultural values are not adequately protected by the unregulated Plan.
- Works on off-river pools lack transparency, making it difficult to quantify the extent of extraction and implement access rules.
- Provisions allowing pool drawdown across much of the Plan area pose a risk to environmental outcomes

Recommended actions for DPE-Water

- Identify priority wetlands where extraction is currently permitted and strengthen provisions to ensure they are adequately protected
- Include rules to protect planned and held environmental water from the regulated river intended for wetlands and streams in the unregulated system
- Introduce dealing rules to ensure that any pool drawdown allowances are not transferable to another person or entity to protect pools
- Prioritise installing equipment to monitor pool water levels in priority lagoons to help manage these environmental assets and support compliance
- Engage with unregulated river access licence holders about voluntary retirement of licenced entitlements in perpetuity to reduce pressure on off-river pools in the Plan area and adjust extraction limits accordingly

Strengthening environmental protections

Key issues

- Nationally significant wetlands are at risk without further understanding of their flow requirements and **access** rules to protect them
- Access rules are not based on best available information and around half of the Plan's water sources do not have flow based access rules
- The Plan references gauges that are no longer operational and some operational gauges are not referenced.

Recommended actions for DPE-Water

- Improve understanding of environmental values and water requirements of Lower Mirrool Creek and Lower Mirrool Creek Floodplain wetlands and review access rules and operating rules for Barren Box storage to adequately protect environmental needs
- Utilise current hydrometric network to establish flow-based access rules to replace no visible flow access rules
- Ensure flow-based access rules support connectivity and adequately protect water sources and their dependent ecosystems
- Revisit the Plan's water source boundaries to determine where they can be merged while still supporting water sharing arrangements at the appropriate scale

Supporting Aboriginal cultural values and uses

Key issues

- Limited engagement and collaboration with Aboriginal stakeholders during Plan development
- Limitations on use of water by Aboriginal people
- Shares have been offered under controlled allocations without evidence that Aboriginal water rights were considered
- The Plan does not protect cultural flows that may originate from the regulated Murrumbidgee River under the existing 2,150 ML cultural access licence for that water source
- Critical state-wide barriers to Aboriginal water rights, and the protection of cultural values remain

Recommended actions for DPE-Water

- Ensure Plan is consistent with the *NSW Water Strategy* relating to Aboriginal peoples' rights and values and increase access to, and ownership of, water for cultural and economic purposes
- Protect the 2,150 ML of Murrumbidgee high-security cultural water if used in unregulated river water sources
- Undertake culturally appropriate consultation with all nations in the Plan area and co-design rules that protect water-dependent Aboriginal cultural values and assets
- Do not restrict new cultural access licences to 10 ML
- Support the Ngunnawal Ngadjung Water Initiative in providing for cultural flows and their protection in the upper Murrumbidgee

Securing town water supply to meet future needs

Key issues

- Water sources of the Murrumbidgee catchment are important for meeting town water supply needs in NSW and the ACT
- Access rules in some water sources do not adequately protect or prioritise downstream town water supply requirements
- There is increasing demand for water supply from population growth largely associated with the Yass region and the Canberra growth corridor
- Some towns are at greater risk of not meeting town water supply needs in the future
- Growing subdivisions may also increase take under stock and domestic rights in some areas

Recommended actions for DPE-Water

- Review the adequacy of access rules for protecting town water supply, particularly in Lower Yass Water Source
- Strengthen access rules based on latest available evidence to ensure town water is adequately protected for high-risk towns
- Determine if projected population growth in the Yass region and Canberra growth corridor warrants adjusting share components for local utility access licences alongside other strategies to augment supply
- Assess the extent to which projected population growth will impact on inflows to Burrinjuck Dam
- Reflect any interjurisdictional governance agreements between NSW and the ACT in Plan provisions

Improving trade outcomes

Key issues

- The Plan lacks clarity regarding trade from the regulated river into unregulated river water sources which may reduce confidence in these dealings
- There has been limited uptake of trade into high flows which are intended to reduce hydrological stress
- The Plan limits interstate trade and does not recognise the role that trade could play in improving environmental and social outcomes

Recommended actions for DPE-Water

- Identify opportunities to facilitate trade across more water sources without compromising environmental values or increasing hydrological stress
- Review lack of uptake of high flow licences and identify additional water sources for trade into high flows
- Assess risks from interstate trade to inform interstate trade agreement
- Provide greater clarity regarding dealings between the regulated and unregulated river water sources
- Collaborate with the ACT Government to finalise interstate trade arrangements



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