NSW GOVERNMENT

Border Rivers Draft Regional Water Strategy

What We Heard

Public Consultation

December 2021

Find out more: www.dpie.nsw.gov.au

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Acknowledgments: The NSW Government acknowledges First Nations/Aboriginal People as Australia's first people practicing the oldest living culture on earth and as the Traditional Owners and Custodians of the lands and waters. We acknowledge that the people of the Bigambul, Githabul, Kambuwal, Gomeroi/Kamilaroi/Gamilaroi/Gamilaraay, Kwiambul and Ngarabal Nations hold a significant connection to the lands encompassed by the Border Rivers Regional Water Strategy.

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Introduction

The Department of Planning, Industry and Environment (the Department) is developing 12 regional water strategies to provide long-term tailored water management solutions for NSW's regional communities.

Our vision for the Border Rivers Regional Water Strategy is to support the delivery of healthy, reliable and resilient water resources for a liveable and prosperous region. To achieve this, we need to position the region so there is the right amount of water of the right quality available to people, Aboriginal communities, towns, industries and the environment.

The draft Border Rivers Regional Water Strategy (the draft strategy) is one of six draft regional water strategies that were released for public exhibition during the second half of 2020.

An extensive engagement and consultation program with the general public and First Nations/Aboriginal People, accompanied the release of the draft strategy. This included several face-to-face meetings, online webinars and opportunities to have a one-on-one phone consultation with the Department's regional water strategies team. Submissions were called for during the public exhibition period.

This report summarises the key issues we heard during the public exhibition and highlights how your feedback has informed the next steps in the development of the Border Rivers Regional Water Strategy.

Figure 1 illustrates the process for developing the regional water strategies.

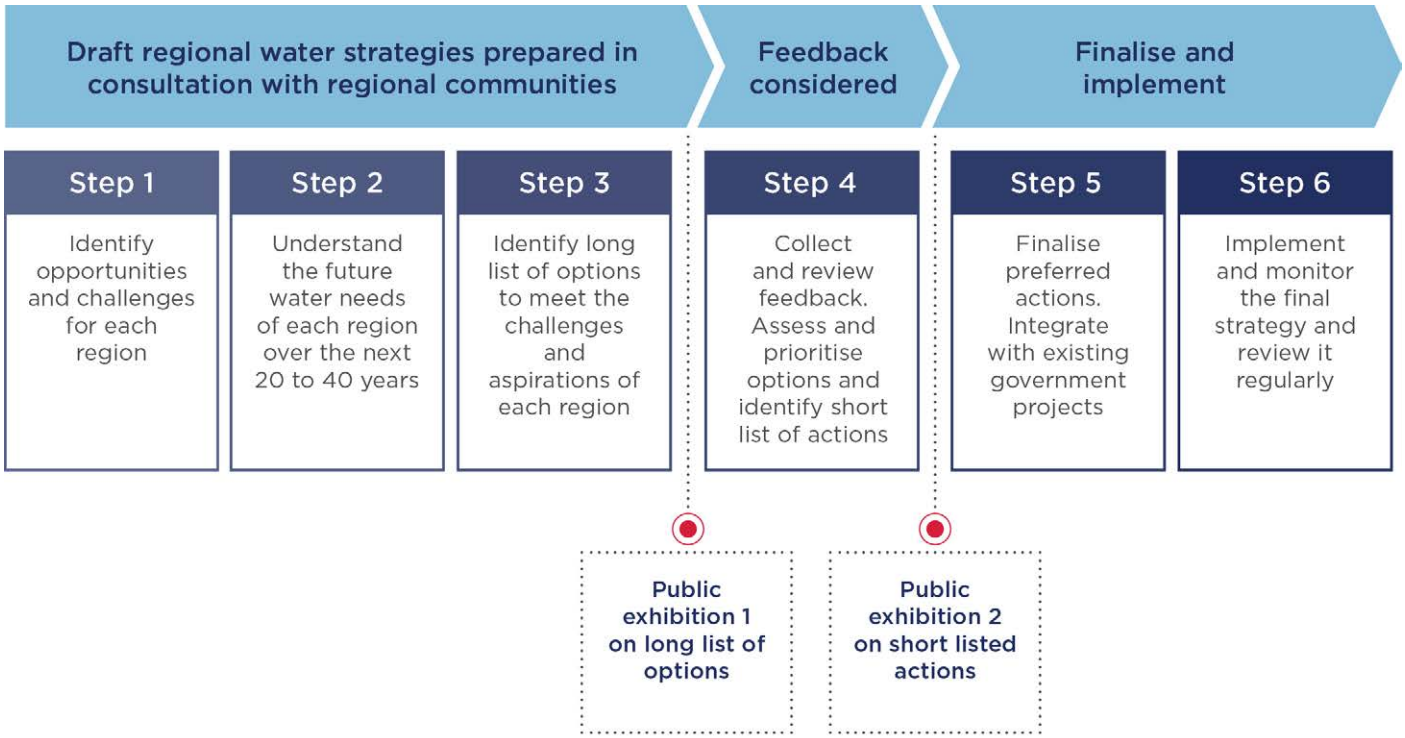


Figure 1: *The Department's approach to the development of the regional water strategies.*

Engagement Approach

Our engagement approach for the regional water strategies program is to share information, gather feedback and collaborate with key stakeholders. This approach on the development of the Border Rivers Regional Water Strategy, has enabled regional communities to have influence in its development.

The Department is using a phased engagement approach, as illustrated in Figure 2. The timeline for engagement activities in Phase 2 (public exhibition) is shown in Figure 3.

How we engaged

The Department's engagement program for the Border Rivers region involved:

- Consultation with councils in the Border Rivers region prior to the draft strategy being released
- A webinar on 20 October 2020, available at https://vimeo.com/484265742
- Community meetings in Inverell and Boggabilla on 10-11 November 2020
- Aboriginal community meetings in Ashford, Inverell, Boggabilla and Glen Innes from 9-12 November 2020
- Aboriginal community meetings in Mungindi in March and June 2021 (outside the public exhibition period)
- One-on-one phone consultations offered during this engagement period
- A formal submission process with over 40 submissions received.

These methods enabled the Department to share information about the regional water strategies program as well as seek feedback on the draft strategy and the long list of potential options.

Who we engaged

During the exhibition period from 20 October - 13 December 2020, the Department communicated and engaged with:

- Aboriginal community members and Aboriginal peak bodies
- Local government and joint organisations
- Business and industry stakeholders
- Landholders
- Peak representative organisations
- Individual members of the public.

Additional engagement on Mole River Dam

In addition to the draft strategy, WaterNSW conducted community engagement on the proposed Mole River Dam business case.

During October and December 2020, WaterNSW held 16 stakeholder briefings, 77 landholder meetings and made hundreds of phone calls, as part of the business case development for Mole River Dam. The development of this business case is identified as an existing NSW Government commitment in the draft strategy.

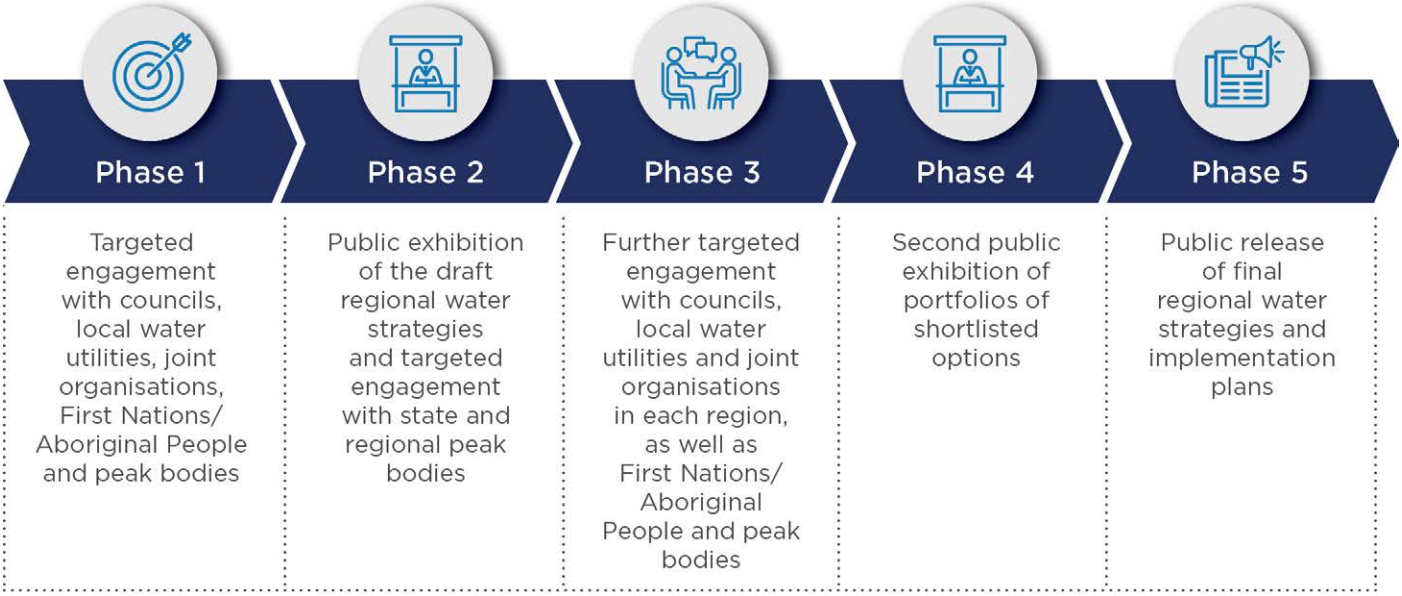


Figure 2: *Phased approach to engagement for the regional water strategies engagement program.*

Figure 3: *Timeline for the engagement activities in the Border Rivers region.*

Engagement at a glance

1
phone consultation

716
unique website page visits

42
formal submissions

2
public information sessions

26
attendees

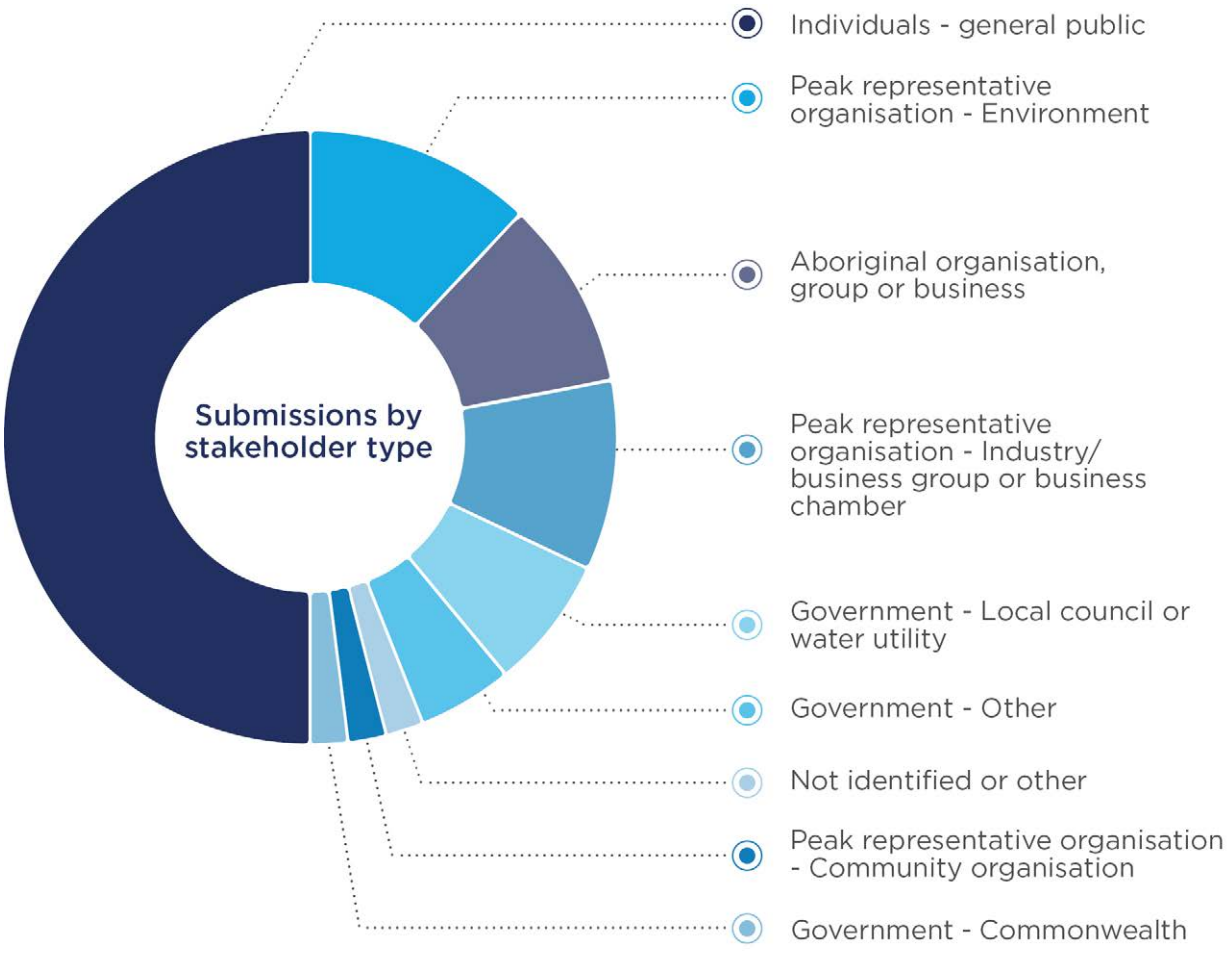
6*
Aboriginal community sessions

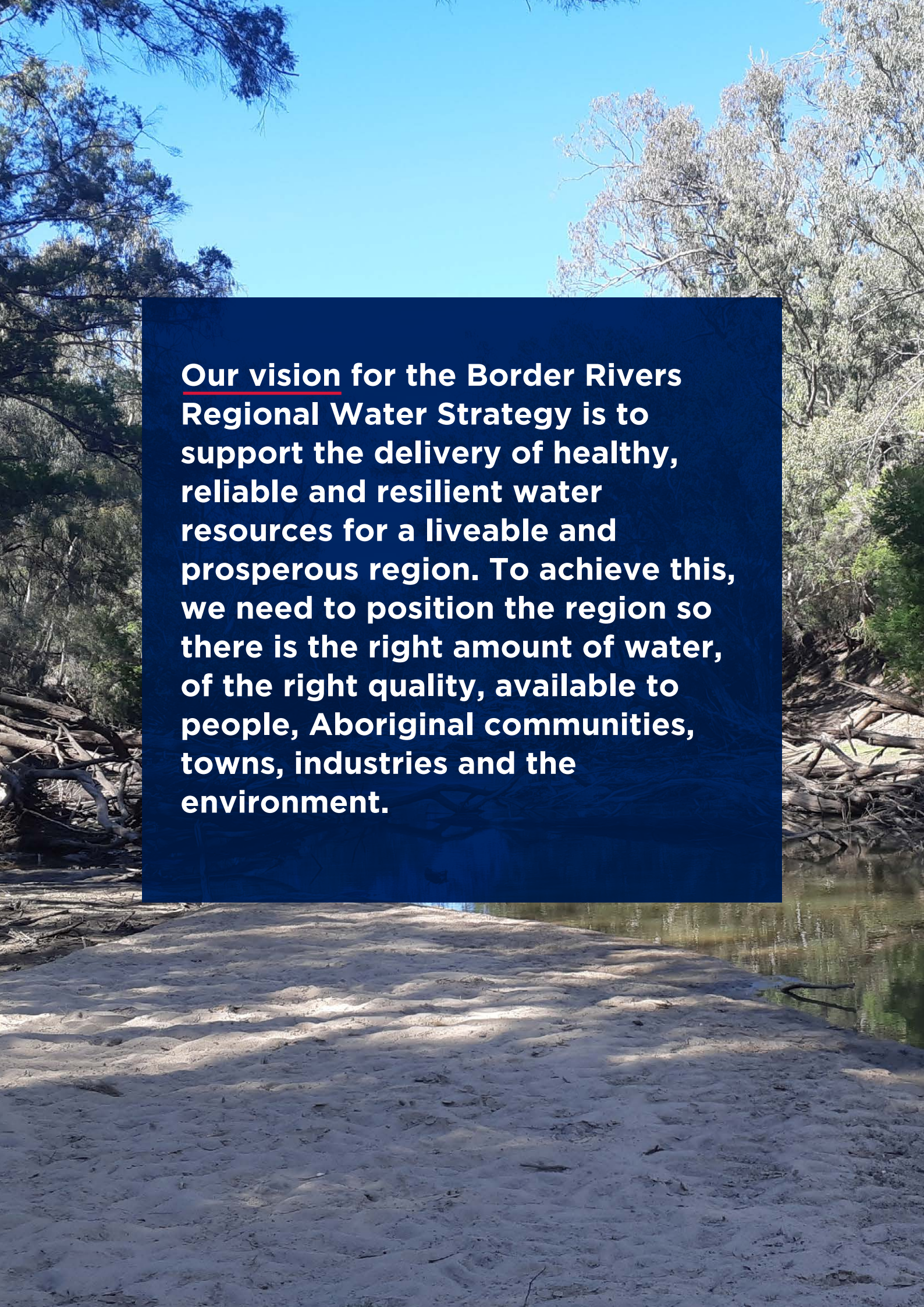
36
attendees

1
live webinar

97
attendees

*The two sessions held in Mungindi were outside of this public exhibition period.





Our vision for the Border Rivers Regional Water Strategy is to support the delivery of healthy, reliable and resilient water resources for a liveable and prosperous region. To achieve this, we need to position the region so there is the right amount of water, of the right quality, available to people, Aboriginal communities, towns, industries and the environment.

What we heard

During the public exhibition we received over 40 submissions on the draft Border Rivers Regional Water Strategy and the long list of proposed options.

There was general support for the regional water strategies program and the development of the Border Rivers Regional Water Strategy. Stakeholders urged the Department to progress the development of the NSW Water Strategy to provide an overarching framework and objectives that would guide the 12 regional water strategies and the associated implementation plans. Since that time, the NSW Water Strategy has been released for public consultation and finalised.

The Department also heard that the next phase of the Border Rivers Regional Water Strategy should be accompanied by an open, transparent and broad scale consultation process to ensure all stakeholder voices are heard and a broad cross-section of the community is represented in the discussion. We will be undertaking a further round of public consultation on a shortlisted set of actions before the Border Rivers Regional Water Strategy is finalised.

The consultation and engagement program for the draft strategy highlighted a wide variety of views on a range of issues. These issues can be categorised under the following themes:

Using the new climate data

Aboriginal water rights and connection to Country

New and existing water infrastructure

Environmental health and connectivity

Entitlement reliability and risk management

Strategic land and water planning and other reforms

Inter-jurisdictional water management

The following sections summarise the feedback received for each of these themes, as well as for the proposed options identified in the long list within the draft strategy.

Themes

1. Using the new climate data

Most of the comments related to the new climate modelling and its impacts on water users and water resource management in the Border Rivers region. Stakeholders emphasised the importance of driving demand management and water efficiency options (e.g. Option 27) as well as enabling training and information sharing opportunities (Option 33) to assist communities in preparing for future climate change.

Key support

- The new climate modelling allows communities to have a conversation about water security and reliability risks in the Border Rivers and about cost-effective ways to address them.
- Aids future business planning and decision-making, and assists water users to be better prepared in case of future climate change.
- Supports investigations into options that improve demand management, increase water use efficiency and focus on sustainable water use.
- The climate modelling illustrates that it is people, not water resources, who must adapt to climate change.
- Modelling results are supported by other research which suggests that the climate change predictions in the draft strategy may not just be a worst-case scenario, but a potential likely future for which the community can prepare.
- Support that the regional water strategies are drawing on the best and latest climate evidence to manage the future water needs of New South Wales.

Key concerns

- How the new climate modelling would be used in future water management decisions with particular regard to planning for worst case, or other level, of climate change scenario.
- How the new data will be shared with communities and agencies to ensure a consistent basis for future climate risk planning.
- Limited information about the link between the new modelling and groundwater sources and the impacts on water quality.
- Suggestions that the worst-case scenario from the climate modelling should not be used to set licence allocations policy given the uncertainties around future climate scenarios.
- Accuracy of the modelling – the review of the modelling method undertaken by the independent expert panel convened by the Chief Scientist and Engineer was not released with the draft strategy.

2. Aboriginal water rights and connection to Country

There was broad support around improving the recognition of First Nations/ Aboriginal People's water rights, interests and access. However, Aboriginal communities voiced their strong disappointment about the lack of engagement in the lead up to the release of the draft Border Rivers Regional Water Strategy.

Key support

- The need to prioritise and protect environmental flows, and establish cultural flows.
- To simplify the application process around applying for Aboriginal cultural licences and provide clear and transparent information on their uses.
- Options that advance employment opportunities, especially for young people, including requests to help Aboriginal land councils develop the land and water licences they currently own.
- Opportunities to integrate Aboriginal knowledge in development of other options (including environmental, groundwater and land use options), and to help in their implementation.
- Strong support for the River Ranger Program, with people on Country looking after Country.
- Protection of local wetlands that have cultural significance including Boobera Lagoon, Pungbougal Lagoon and the Morella watercourse.
- Aboriginal communities support greater monitoring and compliance as it is seen as critical to ensure water take provisions under current arrangements are not misused.

Key concerns

- Limited and infrequent consultation and engagement with First Nations/Aboriginal People in the Border Rivers which left insufficient time to co-design Aboriginal community options.
- Options in the draft strategy do not adequately address the concerns of First Nations/Aboriginal People in the community – particularly infrastructure options.
- Limited focus on water security for Aboriginal communities and options that would drive economic outcomes for First Nations/Aboriginal People.
- Complexity of water policy and laws, and the need to develop tailored educational resources to help empower Aboriginal communities.
- First Nations/Aboriginal People often feel excluded or forgotten in arrangements within their local government area, especially communities that are responsible for providing their own water supplies.

3. New and existing water infrastructure

Most of the comments related to this theme focused on the Mole River Dam business case (Government Commitment 1), the raising of Pindari Dam (Option 2), the raising of Mungindi Weir (Option 3) and the proposed inland diversion from the east (Option 8).

Key support

- Augmentation and construction of new water-related infrastructure could provide greater economic, environmental and water security benefits.
- Mole River Dam would enable improved river management.
- Inland diversion schemes would add new water to the system, underpin water security and reliability of existing licence holders, and open up new opportunities.

Key concerns

- The strategy focused too much on water-related infrastructure instead of sustainable resource management and use.
- Augmentation and construction of new water infrastructure would likely have an impact on the environment and ecology of the Border Rivers, and downstream regions, due to increased regulation and impacts on flow regimes and end of system flows.
- Additional infrastructure would not necessarily provide additional water security. The focus of the strategy should be on reducing demand and improving water use efficiency.
- Questions around why Mole River Dam was presented as an existing government commitment rather than an option.
- Potential impacts on riparian and floodplain landholders.
- Any yield benefits from Mole River Dam would need to be shared with Queensland.
- Limited engagement with First Nations/ Aboriginal People on the Mole River Dam business case and proposed infrastructure options.

4. Environmental health and connectivity

Many comments stressed the need to protect the environment and ecosystems in the Border Rivers region and consider the region as part of the broader Northern Basin.

Key support

- Sustainable water as a focus of the strategy, with options to protect the environment, ecosystems and water sources, as well as enable connectivity.
- The strategy is an opportunity to reset the system and ensure the environment is not deprived of water.
- Opportunities to encourage improved land management, to create habitat for native and threatened species and remove floodplain structures.
- The Northern Basin Toolkit[1] measures should be the foundation to the strategic direction of the strategy.
- The need to review existing sleeper licences and buyback of entitlements to support the environment.

Key concerns

- The strategy seems weighted towards fostering growth of water dependent industries instead of focusing on sustainable use of water.
- Potential environmental impacts if large scale infrastructure projects are progressed.
- Limited detail about catchment health and water quality.
- The vision of the draft strategy is not broad enough and does not consider connectivity across multiple catchments in the Northern Basin.
- The definition of connectivity is not clear and should not be interpreted as drought-proofing the Border Rivers region.
- The water recovery target under the Basin Plan has not yet been met.
- Too much emphasis on flows to protect the environment instead of focusing on non-flow related measures given the river system is intermittent/ephemeral and has episodic cease-to-flow periods.
- The need to use water close to its source and reduce the focus on connectivity.

[1] The Northern Basin Toolkit will invest in a range of environmental works and measures to improve the ecological outcomes of water management in the northern Murray Darling Basin. It is a joint project between the Australian, Queensland and New South Wales Governments.

5. Entitlement reliability and risk management

Most of the comments related to the potential climate change risks on future water availability and reliability of entitlements in the Border Rivers region. Stakeholders emphasised the need to better understand the risks to develop appropriate mitigation strategies and to be better prepared for a possible future with less water.

Key support

- Need to start a conversation about suitable risk management strategies to address potential future impacts to reliability.
- Infrastructure projects, inter-regional pipelines and inland diversion schemes could underpin future reliability and water security as well as bring new water into the region.
- The strategy should provide opportunities to identify suitable options to reduce water demands, promote water efficiency measures and minimise transmission and evaporation losses.

Key concerns

- The reliability of some entitlements is already low and could decline further with climate change.
- The impact of some options on future entitlement reliability. Suggestions were put forward to conduct a comprehensive Reliability Impact Assessment of all options. This would enable the analysis of both positive and negative impacts of each option on reliability, for entitlement holders.
- Water resources in the Border Rivers region cannot support further growth of the population and industry, nor more permanent plantings in the region.
- Concerns about limited clarity on how the new climate datasets and modelling will be used in future water allocation decisions and the potential impact on reliability.
- The option to convert general security entitlements to high security entitlements could reduce the security of all other water users.
- Suggestions that the Border Rivers is already over-allocated and that this increases the climate change risks for the region.
- The regional water strategies should not just focus on worst-case scenario.
- Management of water in the region should be agile and adaptive to intervene as extreme events approach.

6. Strategic land and water planning and other reforms

Most comments related to the interactions between land and water resources and the various risks different land uses pose to water resources. Stakeholders also raised the need to more closely align the regional water strategies with regional and economic development strategies.

Key support

- Integration of regional water strategies with relevant regional and economic strategies supports realisation of better outcomes in the region.
- Need to look at broader catchment management solutions and encourage improved land management to protect water resources.
- Consider opportunities for regenerative farming to increase soil carbon, absorb more rain in the landscape and increase land productivity.
- Use of local Aboriginal knowledge to improve land and water outcomes.
- Improved monitoring, gauging and data collection to better protect water sources and improve land management.
- Future development opportunities in Central Queensland and Western NSW that focus on new technologies and sustainability.

Key concerns

- Soil erosion from agricultural land and livestock accessing waterways, have contributed to water source pollution which has impacted water quality.
- Impact on flows in the streams in and around areas with increased permanent (versus seasonal) planting.
- Management of first flush and low flows in the Border Rivers and broader Northern Basin. Some stakeholders emphasised that small, localised flows in tributaries are important to achieving connectivity to the Darling River.
- General concerns around the floodplain harvesting reforms and licensing of floodplain harvesting. Several stakeholders voiced their concerns about any water harvesting from areas that depend on flooding to fulfil their ecological functions.

7. Inter-jurisdictional water management

The majority of comments questioned the NSW centric approach to the Border Rivers strategy development. They asked how the department could ensure the options shortlisted are consistent with the Basin Plan, requirements of the NSW Water Management Act 2000 and inter-jurisdictional water management arrangements with Queensland.

Key support

- Opportunities to improve monitoring and management of cross-border flows between NSW and Queensland.
- Opportunities to manage the whole of Border Rivers and Barwon Darling areas together to ensure waterway connectivity across the entire Northern Basin.
- Opportunities to align planning and management of water resources in the NSW and Queensland areas.
- Opportunities for intra-regional pipeline connections in the east and north-east, and inter-regional pipeline connections such as to Stanthorpe in Queensland; also for pipeline connections from the Great Artesian Basin to the east of the catchment. However, some stakeholders raised strong opposition to inter-regional pipeline connections.

Key concerns

- The draft strategy only focuses on water issues in NSW, or as suggested, "One half of the catchment".
- The strategy fails to articulate how the Border Rivers interact with the rest of the Northern Basin, including downstream communities that depend on the Darling River.
- Cross-border water sharing and management, including for groundwater, is complex.
- Some water sharing arrangement between Queensland and NSW considered inequitable.
- Limited engagement with stakeholders in the Queensland areas of the Border Rivers region.
- Concerns about water taken on the Queensland side of the border and how it impacts Aboriginal communities in NSW.

Options

Long list of proposed options in the draft Border Rivers Regional Water Strategy

Maintaining and diversifying water supplies

1. Final business case for building a new dam on the Mole River
2. Raising Pindari Dam's full supply level
3. Raising Mungindi Weir
4. Piping water to stock and domestic water users in the unregulated section of Boomi River
5. Improve cross-border management of flows at major breakout points
6. Reliable access to groundwater by towns
7. Intra- and inter-regional connections project investigation
8. Inland diversions from the east
9. Managing groundwater salinity

Protecting and enhancing natural systems

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
14. Implement state-wide groundwater quality monitoring program and management program
15. Modification and/or removal of existing priority floodwork structures causing adverse impacts
16. Providing incentives to landholders to conserve and rehabilitate riparian, wetland and floodplain vegetation
17. Riparian habitat restoration and re-establishing threatened species
18. Investigate land use change impacts on water resources
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
22. Improve understanding of water use in unregulated water sources
23. Improve connectivity with downstream systems
24. Protecting ecosystems that depend on groundwater resources

Supporting water use efficiency and conservation

25. Review of water markets in the Border Rivers region
26. Reuse, recycle and stormwater projects
27. Water efficiency projects (towns and industries)
28. Review urban water restrictions policy

Strengthening community preparedness for climate extremes

29. New drought operational rules
30. Review of regulated river water accounting and allocation process
31. Investigation of licence conversions
32. Improved data collection
33. Investigation to maintain amenity for regional towns during drought
34. Training and information sharing program
35. Sustainable access to groundwater
36. Improved clarity in managing groundwater resources sustainably
37. Improved understanding of groundwater processes
38. Extending the Cap and Pipe the Bores Program
39. Maintaining the Great Artesian Basin for the future
40. Support reforms to simplify and strengthen cross-border groundwater management
41. 41. Improve knowledge of fractured rock groundwater sources in the upper catchment

Improving the recognition of Aboriginal people's water rights, interests and access to water

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
49. Co-management investigation of Travelling Stock Reserves
50. Regional Cultural Water Officer Employment Program
51. River Ranger Program

Table 1: *Long list of proposed options for the Border Rivers region.*

Options 1-9: Maintaining and diversifying water supplies

Mixed reactions to the proposed large infrastructure projects with a general sentiment to protect and maintain natural flows in the river system and restore or regenerate natural habitats.

Options	Summary of feedback received
1. **Government Commitment - Final business case for building a new dam on the Mole River**	• There was both strong support and opposition to this option. • There was concern expressed that this was included as a government commitment rather than an option. • Concerns revolved around: – Potential negative impacts of increased interference with the environment and river ecology – Capital cost and questions as to whether the dam would service local regional needs. Suggestions that rather than building a new dam, money should be spent on options that reduce water demand and increase the health of rivers. • Key support revolved around: – The role that the proposed new dam could play in larger water diversion across the border or into other regions. – The dam could aid the economic prosperity of the region.
2. **Raising Pindari Dam's full supply level**	• There was both strong support and opposition to this option. • There was concern expressed for the negative impact of inundation on river habitats and native species' ecosystems, without appropriate improvements in water security. • There was support for raising Pindari Dam over building a Mole River Dam as it is was seen to have a lower environmental impact. • The Border Rivers catchment is already at its sustainable diversion limit. Raising Pindari Dam or building Mole River Dam would not bring any new water into the systems, but change accessibility between different users - creating winners and losers. • This option would have potential implications for Queensland cross-border water sharing.
3. **Raising Mungindi Weir**	• Reduced natural flows, potentially impacting fish species and other river ecosystems and habitats, was a main concern raised. • Work on the weir provides opportunity to address fish passage. • Raising Mungindi weir would increase end of system storage capacity and could provide better management of outcomes for Darling River.

Options	Summary of feedback received
4. Piping water to stock and domestic water users in the unregulated section of Boomi River	• Concern was raised that this option would alter the flow regime and put environmental assets and outcomes at increased risk.
5. Improve cross-border management of flows at major breakout points	• Some cross–border flows are due to bank erosion around existing infrastructure. • There needs to be better understanding of the amount of water that could flow from NSW to Queensland at these breakout points to determine if it is significant and requires action. • Some concerns were raised that this option would have potential implications for Queensland cross-border water sharing. • There were comments about how we need to better manage resources as a whole rather than through state borders.
5. Reliable access to groundwater by towns; and **9. Managing groundwater salinity**	• Respondents shared support for improving reliable access to groundwater to service town needs, as well as managing groundwater salinity. • There was support for further research into groundwater sources to inform their management. • Suggestions were made to explore Aboriginal land management practices in managing salinity.
7. Intra- and inter-regional connections project investigation; and **8. Inland diversions from the east**	• There was both strong support and opposition to inland diversions. • Respondents mainly rejected these options as having been investigated multiple times in the past, and not being progressed through lack of viability and high cost. • Diverting waters from the Clarence River inland would have significant impacts on the Clarence estuary and result in a significant amount of interference with the natural environment. • Diverting water inland would bring more water into the Border Rivers and would create economic development opportunities. It could be combined with a proposed Mole River Dam.

Options 10-24: Protecting and enhancing natural systems

Feedback for the proposed options in this category was overwhelmingly supportive of the preservation or restoration of the natural characteristics of the river system.

Options	Summary of feedback received
10. NSW Fish Passage Strategy **11. Diversion screens to prevent fish extraction at pump offtakes** **12. Cold water pollution mitigation measures** **15. Modification and/or removal of existing priority floodwork structures causing adverse impacts**	• Positive feedback on the potential improvements to fish movement, habitat and riverine productivity. • Removal of structures from floodplains was supported for its potential to improve downstream connectivity, support groundwater recharge and wetland health.
13. Investigation of surface water quality mitigation measures **14. Implement state-wide groundwater quality monitoring program and management program**	• Real-time monitoring was supported as it can inform river management and operations in both normal and drought conditions. • Options to increase knowledge and understanding of groundwater were generally supported.
16. Providing incentives to landholders to conserve and rehabilitate riparian, wetland and floodplain vegetation **17. Riparian habitat restoration and re-establishing threatened species** **18. Investigate land use change impacts on water resources**	• Feedback supported these options for the consideration and positive impact on the riparian habitat and health of threatened species in the system. • Engagement and partnership with Aboriginal land managers and councils was encouraged to assist in identifying appropriate native species that will help to improve water quality and biodiversity benefits. • Suggestion was made to provide incentives for landowners to implement land management practices that increase ability of soil to store water.
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** **22. Improve understanding of water use in unregulated water sources.**	• Comments received were supportive of all these options. • Respondents expressed support for improvements in management of existing dams, protection of environmental flow releases and increasing our knowledge to inform decision making. • Some comments suggested that these options could go further, and be expanded, to address the needs of the region, actively manage and protect planned environmental water, and have greater compliance monitoring of unregulated water sources.

Options	Summary of feedback received
23. Improve connectivity with downstream systems	• Feedback expressed support for improved connectivity. • There were questions about what the objective of connectivity is and suggestions that to achieve this we need to develop a common understanding of what connectivity means and would look like in practice. • Respondents considered that an approach to managing the whole river system, irrespective of state borders, was needed.
24. Protecting ecosystems that depend on groundwater resources	• Feedback was supportive of the protection of groundwater dependent ecosystems.

Options 25-28: Supporting water use efficiency and conservation

There was consistent support for these options, with a keen sense of community involvement, innovation and activation to achieve efficiency and conservation outcomes.

Options	Summary of feedback received
25. Review of water markets in the Border Rivers region	• Collaboration was encouraged in the feedback - for the state governments and agencies to work together on water market and cross-border initiatives. • It was suggested that a review could include: the complexity of inter-state trading; different carryover arrangements between NSW and Queensland; accounting for losses; and real-time trading of supplementary allocation.
26. Reuse, recycle and stormwater projects	• Feedback supported these initiatives as providing ways to supplement town water supplies and to conserve water resources. • Comments suggested that this could go further to include options for communities not currently connected to town water supplies, and to facilitate funding and co-funding opportunities that improve efficiency and conservation.
27. Water efficiency projects (towns and industries) **28. Review urban water restrictions policy**	• Feedback supported innovation and continuous examination of emerging technologies that support and promote water efficiencies. • On-farm storage and industrial uses were also commented on as areas to focus innovation with potential for significant improvements.

Options 29-41: Strengthening community preparedness for climate extremes

The proposed options in this category were generally supported with an acknowledgement that further research needs to be done into all groundwater sources to enable their sustainable management.

Options	Summary of feedback received
29. New drought operational rules **30. Review of regulated river water accounting and allocation process** **34. Investigation to maintain amenity for regional towns during drought**	• Feedback supported these options. • Comments called for consideration to be given to clear definition and identification of critical human and environmental needs. • Greater clarity needed on the weighting that proposed new operational rules will place on guaranteeing supply. • Feedback advocated that industry and economic considerations should not outweigh social, cultural and environmental concerns. • Submissions suggested a need to reconsider how regulated water is allocated in anticipation of reduced water availability. • Security of town water supply was a concern for respondents. • Support for further research into maintaining town water supplies under drought conditions. • Some feedback questioned the necessity to manage reserves and allocations for the drought of record every year, or if a more adaptive approach would be more effective; suggesting to allow government to intervene as extreme events approach.
31. Investigation of licence conversions	• Comments received expressed concern about the potential negative impact converting licences could have on other licence holders. • Water reliability was not considered secure enough for this option.
32. Improved data collection **33. Training and information sharing program**	• There was general support for initiatives that improved knowledge and understanding of water, from all sources, in the region. • New climate data and modelling needed to be made available to the community and other agencies.

Options	Summary of feedback received
35. Sustainable access to groundwater **36. Improved clarity in managing groundwater resources sustainably** **37. Improved understanding of groundwater processes** **38. Extending the Cap and Pipe the Bores Program** **39. Maintaining the Great Artesian Basin for the future** **40. Support reforms to simplify and strengthen cross-border groundwater management** **41. Improve knowledge of fractured rock groundwater sources in the upper catchment**	• There was overall support for these options. • There was strong support for investigation and research into groundwater and fractured rock sources. • Some felt that the proposed research into groundwater sources was overdue. • Feedback suggested that bores need to be replaced where there is uncontrolled flow, or where they are inefficient. • Adjust or reduce entitlements and rights to match extraction limits where current entitlements and basic rights extractions exceed sustainable yields. • Support was expressed for including Aboriginal water and land management knowledge into research and management approaches for groundwater.

Options 42-51: Improving the recognition of Aboriginal people's water rights, interests and access to water

Options to protect and strengthen cultural landscapes, practices, knowledge and traditions, as well as to support empowerment, self-determination and economic advancement of First Nations/Aboriginal People and communities, were well supported in the feedback.

Options	Summary of feedback received
42. Culturally appropriate water knowledge program	• Feedback acknowledged that 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.
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)**	• Comments were supportive of options that promote support and protection for cultural practice and heritage sites. • Feedback encouraged options that resulted in shared benefits with positive environmental, social and cultural outcomes.
46. Establish a regional Aboriginal Water Advisory Committee	• Feedback encouraged options that resulted in positive environmental, social and cultural outcomes for Aboriginal communities. • A review of cultural water access licences was supported, with a view to enabling Aboriginal communities to directly manage water in support of their values and cultural sites. • Concern was expressed that the proposed Advisory Committee would have no decision-making rights. • Concern was also expressed that the proposed Advisory Committee could conflict with existing Aboriginal community management structures.
47. Water portfolio project for Aboriginal communities **48. Aboriginal cultural water access licence review**	• Feedback supported options that enable greater participation of Aboriginal communities in water management.
49. Co-management investigation of Travelling Stock Reserves **50. Regional Cultural Water Officer Employment Program** **51. River Ranger Program**	• Active Aboriginal participation in these proposed programs was strongly supported, with particular support for the River Ranger Program. • Suggestions were made to direct resources to existing Aboriginal controlled organisations to support these purposes and outcomes, in place of introducing new programs.

Suggested additional options

Respondents provided suggestions for additional potential options. There were many suggestions that related to existing proposed options, offering enhancements or further detail, and these are being considered. The following suggestions were assessed as new options and reflect opportunities for further innovation and economic diversification. These ideas will be considered in the option shortlisting, which will form part of the next stage of the development of the Border Rivers Regional Water Strategy.

Options	Summary of feedback received
Reducing evaporation	• An innovative solution for reducing evaporation from on-farm storages. Options should consider flood water and high flows and solutions such as floating solar farms that provide the double benefit of a renewable energy source.
Water for discrete and remote communities	• Provision of stand-alone drinking water for remote or discrete communities through investment in hydro-panels.
Catchment management	• Encourage improved management of lands throughout the catchment to increase soil carbon, absorb more of the rain that falls, and release water more gradually to sustain stream flows - enabling better production from these soils.

Response

Response to feedback

Since the publication of the draft Border Rivers Regional Water Strategy, the NSW Water Strategy had been developed. Some of the issues highlighted in the Border Rivers Regional Water Strategy and from communities in the Border Rivers region are consistent challenges across the State. These state-wide issues have been included as priority focus areas in the NSW Water Strategy and are outlined below.

Your feedback has been used to refine the key challenges that we need to focus on in the final Border Rivers Regional Water Strategy, and the options that will be shortlisted for further investigation.

Further consultation

We have heard and accepted your feedback requesting more consultation on the regional water strategies, and a greater say in how options are shortlisted and prioritised.

As a result, we will be undertaking public consultation on a shortlist of actions before the Border Rivers Regional Water Strategy is finalised.

New climate data

The new climate datasets and updated modelling that underpin the draft Border Rivers Regional Water Strategy are an important advance on previous climate work. We can now better assess the likelihood of a range of drought conditions, and the impacts on surface water security and reliability over a much wider range of climate conditions. This is a major improvement from our previous reliance on the observed historical records only.

The key next step is to work with the community to detail how this climate data should be used. This may include establishing the risk appetite of the community and identifying which historical droughts should be used as the basis for water management.

Importantly, there may not be a one size fits all approach to using the new climate data for different elements of water management. Consideration needs to be given to the length of time a policy, planning or infrastructure option will have and its 'functional life'. For a planning decision in a water sharing plan, this functional life is 10 years or less before an opportunity to review. As such, utilising climate data based on a climate change scenario 40 years into the future may not be necessary, or appropriate. However, the construction of a piece of infrastructure, with a lifespan of 100 or more years, should consider the full range of climatic conditions which may be experienced during the life of the project.

A priority action in the NSW Water Strategy is for the NSW Government to review water allocation frameworks and water sharing plan provisions in response to new extremes in water availability. This will include exploring risk management approaches for a more adaptive water allocation and accounting framework, and understanding how the new climate data can inform this work. Progressing this requires detailed and focused engagement with the community. It cannot happen overnight. It also depends on communities having a workable understanding of these risks, and conversations with communities about the level of risk they are willing to accept.

The new climate data is already being used in business cases to assess the impacts and benefits of proposed major state water infrastructure. This information will be useful for local water utilities and other stakeholders in assessing the long-term water security of individual towns. Making this data available in a useable format is a priority under the Town Water Risk Reduction Program.

As with all types of science, we need to continually improve the data. The next steps in continuing to improve the climate data and modelling method will be to apply it to assess climate impacts on groundwater and associated risks. This is being progressed through the Groundwater Strategy.

Aboriginal water rights

One of the primary objectives of the draft Border Rivers Regional Water Strategy is to recognise and protect Aboriginal water rights, interests and access to water. It is also priority number 2 in the NSW Water Strategy.

While there were unfortunately limited opportunities to engage with First Nations/ Aboriginal People in the Border Rivers prior to the release of the draft strategy, the Department remains committed to engaging with First Nations/Aboriginal People in the region as we progress through the options assessment process, and the development of the final Border Rivers Regional Water Strategy and the Aboriginal Water Strategy.

Unlike many other challenges in the region, the fundamental water rights of First Nations/Aboriginal People is still a major gap in water management across NSW and the Basin. Addressing this issue will need a state-wide approach. The state-wide options will be progressed through a State Aboriginal Water Strategy. Opportunities to progress region-specific Aboriginal community options, in parallel with this state-level action, will be explored in the final Border Rivers Regional Water Strategy.

Environmental health and connectivity across basins

The feedback on the draft Border Rivers Regional Water Strategy was supportive of the options to improve environmental health and connectivity across the Northern Basin.

It reinforced that there is no agreed definition or understanding of 'connectivity', or what an acceptable level of connectivity is across the community. The issue of connectivity will impact multiple connected catchments across the Northern Basin and will be progressed through the Western Regional Water Strategy. This is also addressed by action 3.7 of the NSW Water Strategy which commits the government to working with communities to better understand and improve system connectivity.

Integrating land use and water management

There is an important link between land use and water management. How land is used determines water management needs – whether water is servicing urban developments or being provided to other uses (including industry, environmental, cultural or recreational needs). Land use planning decisions and development control also have a key role to play in protecting water sources for supply, on the health and stability of waterbodies, and on receiving water quality.

Future water reliability and security in a changing climate will be critical to land use, urban development planning decisions and industry development initiatives in regional NSW. In particular, there is an opportunity to consider water availability and impacts much earlier and more strategically through the planning system. We have begun this work by using the evidence in the regional water strategies to inform:

- The next generation of regional plans.
- Special activation precincts – including the Moree and Namoi Special Activation Precincts. While these precincts are not in the Border Rivers catchment, the proximity of these to the Border Rivers catchment may mean there are indirect influences on the catchment.
- Regional job precincts.

We acknowledge that the boundaries of these plans and strategies do not always align with the Border Rivers Regional Water Strategy boundaries, hence the NSW Water Strategy has committed to better integrate land use planning, development approvals and water management (NSW Water Strategy Action 4.4) across the state. In addition, the NSW Water Strategy commits to adopting a more intense, state-wide focus on improving water quality (NSW Water Strategy Action 3.5) through the definition of clear roles, accountabilities and frameworks for monitoring, assessing and addressing water quality risks across the state.

The Department of Primary Industries – Agriculture is undertaking a three-year program to identify and map important agricultural land. Knowing where this land is situated and understanding value and contribution to the state's economy and food security will assist in making decisions about current and future land uses and their water needs. A comprehensive and consistent approach to collecting water statistics and related information will greatly help this process.

Links with Queensland and inter-jurisdictional water management

The draft Border Rivers Regional Water Strategy recognises the uniqueness of this catchment due to its water resources and infrastructure being regulated and shared jointly between NSW and Queensland. While the scope of the Border Rivers Regional Water Strategy is confined to NSW, we recognise that anything that happens on the NSW side of the catchment will impact Queensland and vice versa. As such, any option that is identified as a priority in the regional water strategy will need to be progressed in close consultation with Queensland and the Border Rivers Commission, and operate within the requirements of the Basin Plan.

We will continue to work with the Queensland Government and our jurisdictional counterparts to help make water management arrangements as consistent as possible in border communities.

Water reliability and infrastructure

Individual infrastructure options will be assessed as part of the rapid cost benefit analysis when shortlisting the options. Each infrastructure option has separate benefits, costs and impacts localised to the area and the catchment.

Next steps

Your feedback during the public exhibition will help us to refine the key challenges that the strategy needs to focus on improving, and which of the 51 proposed options listed in the draft Border Rivers Regional Water Strategy should be shortlisted to help address these challenges. Your feedback has also identified a number of new options that will be assessed.

The next steps in our engagement will be to seek your views on the shortlisted actions before the Border Rivers Regional Water Strategy is finalised. Your ongoing engagement is important to ensure we are identifying solutions for the Border Rivers region that meet the vision and needs of communities, industries and the environment.

A final package of actions will be presented as part of the final Border Rivers Regional Water Strategy and associated implementation plan. This is scheduled for release in 2022.

More information:

www.dpie.nsw.gov.au/regional-water-strategies

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