NSW GOVERNMENT

Draft Border Rivers Regional Water Strategy

What we heard

Public consultation: June 2022

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Find out more: water.dpie.nsw.gov.au/plans-and-programs/regional-water-strategies

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Cover image: Image courtesy of Floodplain Harvesting Team, Department of Planning and Environment - Water. Barwon River, Mungindi.

Acknowledgments: The NSW Government acknowledges First Nations people as its first Australian people and the traditional owners and custodians of the country's lands and water. First Nations people have lived in NSW for over 60,000 years and have formed significant spiritual, cultural and economic connections with its lands and waters.

Today, they practice the oldest living culture on earth.

The NSW Government acknowledges the First Nations people/Traditional Owners from the Border Rivers region as having an intrinsic connection with the lands and waters of the Border Rivers Regional Water Strategy area. The landscape and its waters provide the First Nations people with essential links to their history and help them to maintain and practice their traditional culture and lifestyle.

We recognise the Traditional Owners were the first managers of Country and incorporating their culture and knowledge into management of water in the region is a significant step towards closing the gap.

Under this regional water strategy, we seek to establish meaningful and collaborative relationships with First Nations people. We will seek to shift our focus to a Country-centred approach, respecting, recognising and empowering cultural and traditional Aboriginal knowledge in water management processes at a strategic level.

We show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places where First Nations people are included socially, culturally and economically.

As we refine and implement this regional water strategy, we commit to helping support the health and wellbeing of waterways and Country by valuing, respecting and being guided by First Nations people/Traditional Owners, who know that if we care for Country, it will care for us.

We acknowledge that further work is required under this regional water strategy to inform how we care for Country and ensure First Nations people/Traditional Owners hold a strong voice in shaping the future for Indigenous/Aboriginal and non-Aboriginal communities.

Contents

Introduction

The NSW Government is taking action to improve the security, reliability, quality and resilience of the state's water resources for current and future generations.

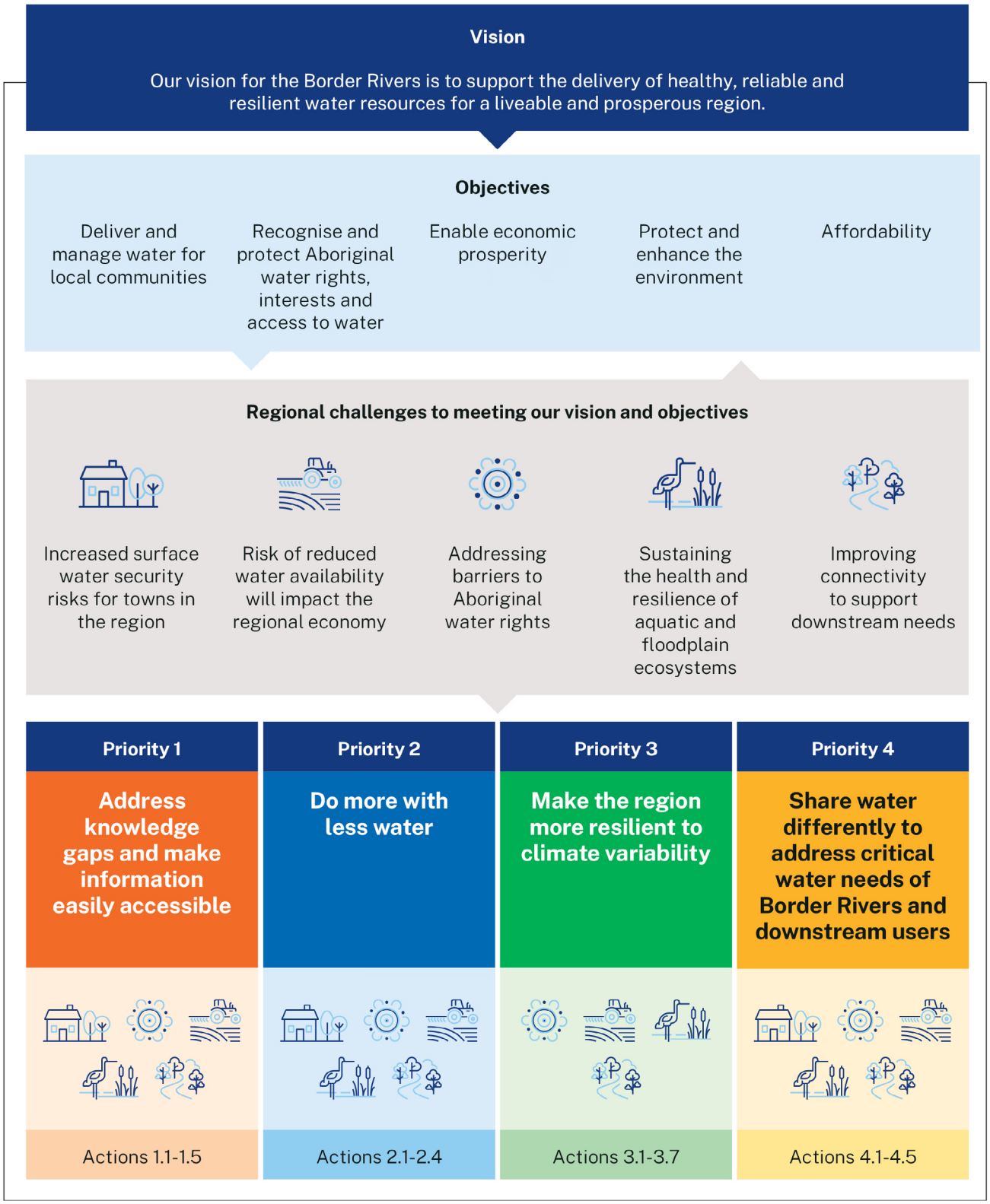
As part of this program of investment and reform, the NSW Department of Planning and Environment (the department) has prepared a number of regional water strategies across NSW.

Figure 1 *Map of NSW regional water strategy regions*

The regional water strategies adopt a long-term approach to strengthening and building the reliability and quality of the State's water resources for the next 20 years. They combine climate evidence and economic and ecological analysis, with input from water service providers, local councils, communities, Aboriginal people, and other stakeholders.

They consider how much water a region will need to meet future demand, the challenges and choices involved in meeting those needs, and the actions that need to be taken to manage water availability and security risks.

Figure 2 *Border Rivers Regional Water Strategy: overview of strategy vision, objectives, water security challenges and priorities*



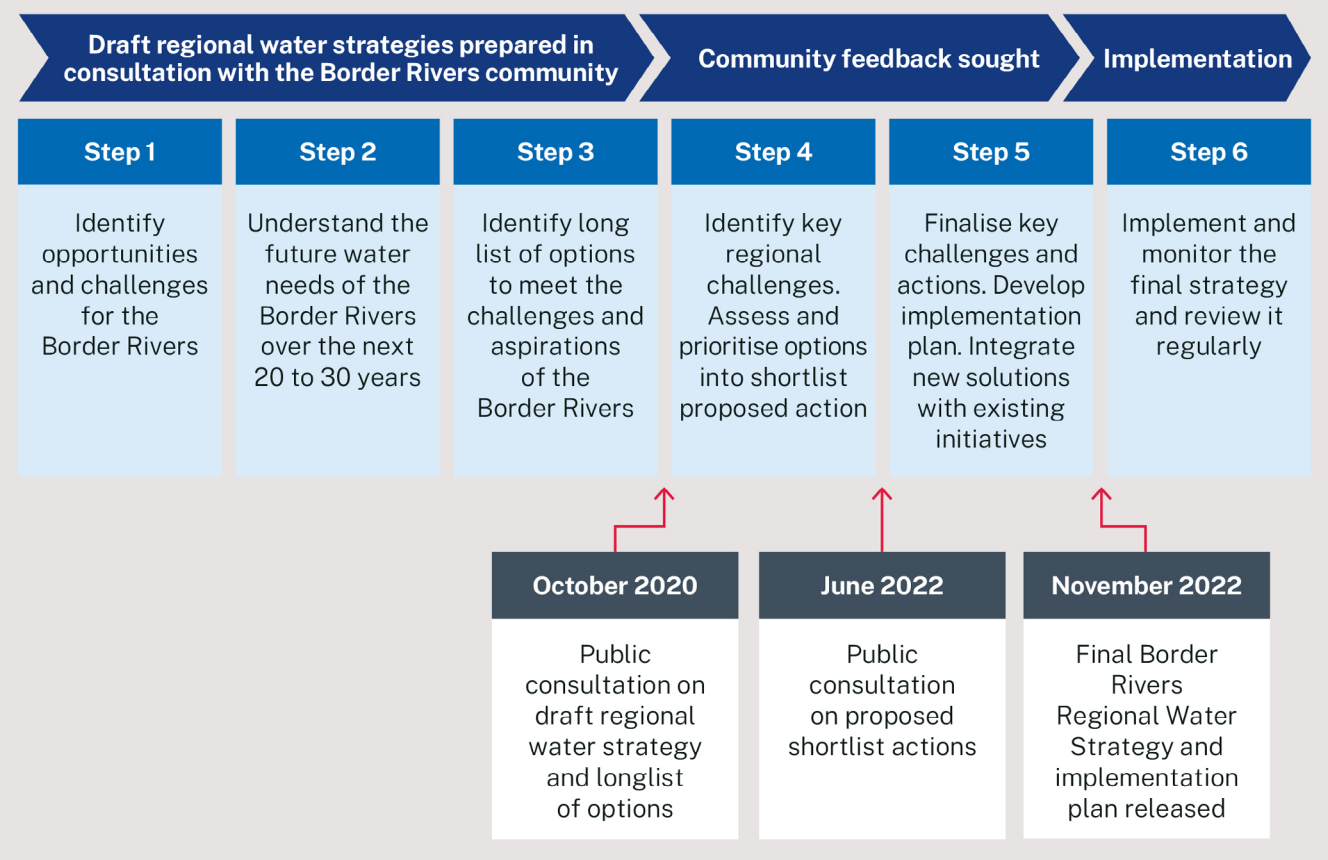
Consultation

The purpose of consulting with the community during strategy development was to share information and gather feedback to shape the strategy and implementation plan over a 3-year phased engagement approach.

How we engaged

The department has taken a staged approach to developing the Border Rivers Regional Water Strategy (strategy) which has been informed by community engagement at each step.

Figure 3 *Regional water strategies implementation*



Public consultation phase 1 (October 2020)

The draft strategy was placed on public exhibition from 20 October to 13 December 2020. It included a detailed analysis of the challenges and opportunities in the region, as well as a long list of options with the potential to address the challenges and opportunities.

The feedback received during public consultation phase 1, and the department's response to this feedback, is published in the Border Rivers Region Draft Regional Water Strategy What We Heard (2021) report.

Following the first round of consultation, and further technical analysis and modelling, the long list of 51 options was distilled into 4 priority areas and 22 shortlisted actions designed to address the water security challenges specific to the Border Rivers region.

Public consultation phase 2 (June 2022)

A second draft strategy—comprising an Executive Summary and Consultation Paper—was placed on public exhibition from 1 June to 29 June 2022.

During public consultation phase 2, the department engaged with:

- Aboriginal communities
- Local councils
- Landholders
- Business and industry groups
- Peak organisations
- Community members and organisations.

A timeline of engagement activities is shown below:

Figure 4 *Public consultation phase 2 timeline of activities*

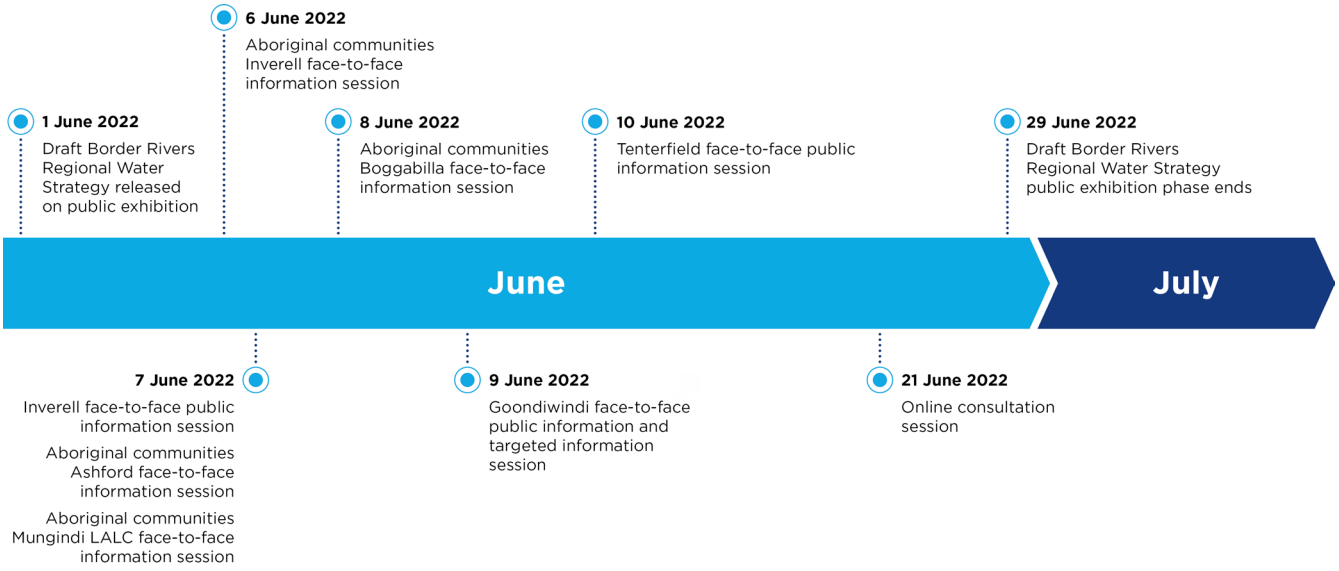


Figure 5 *Public consultation phase 2 engagement at a glance*

418
unique website page visits

17
formal submissions

- **9** Emails
- **6** PDF fillable forms
- **2** Social Pinpoint fillable forms

4
Aboriginal community sessions

- **35** attendees

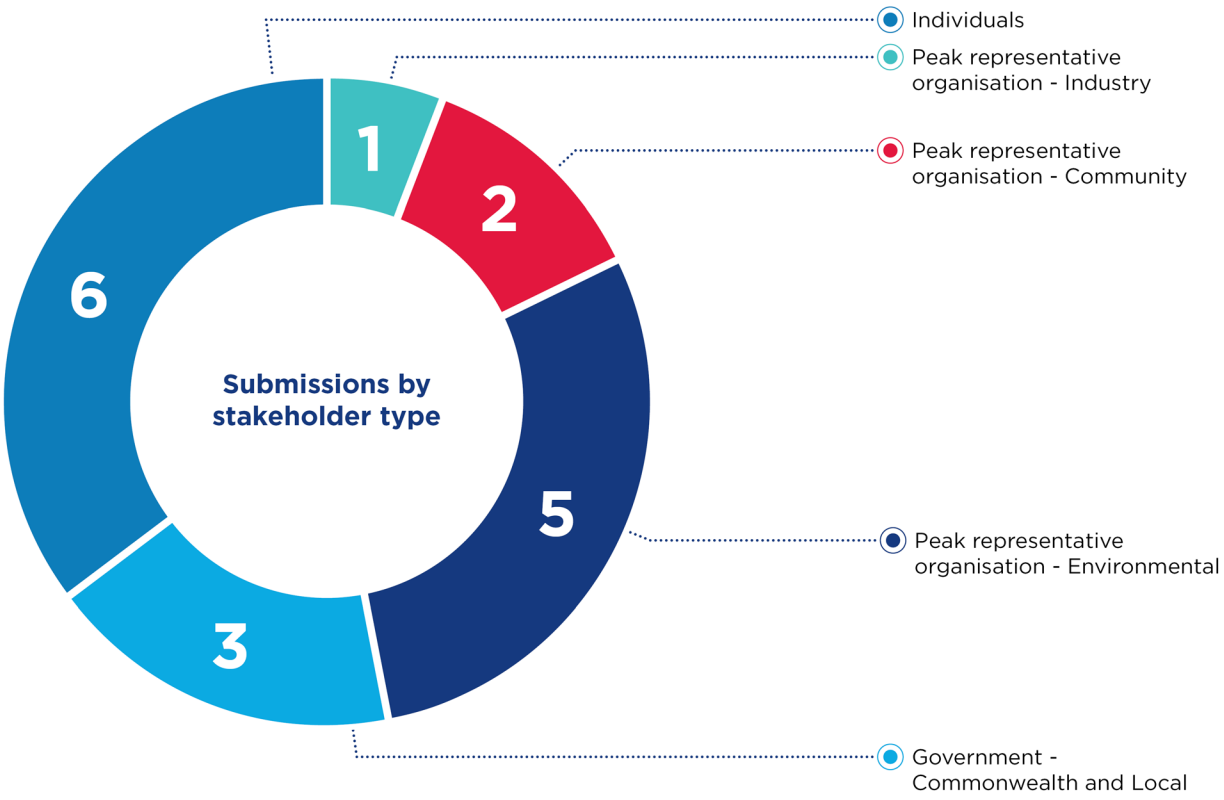
1
live webinar

- **24** attendees

3
public information sessions

- **37** attendees

Figure 6 *Public consultation phase 2 overview of submissions by stakeholder type*



Summary of key themes raised

The department received a range of general feedback on the draft strategy. Stakeholders raised broadly consistent themes across public consultation phases 1 and 2. However, during phase 2 there was less feedback about the integrated management of land and water, and more feedback about improving connectivity within and between catchments, including alignment with the draft Western Regional Water Strategy.

Table 1: *Summary of feedback by theme*

Theme	Public consultation phase 1	Public consultation phase 2
	**Using the new climate data** While there was broad support for using new climate data, there was some concern about how the new climate data modelling would be used in future water management decisions.	**Climate and water data, information and modelling** There was strong support for improving the availability of climate information, data and modelling. Improving flood and water modelling and data, in particular for floodplain flows and unregulated rivers, were also supported. There was support for additional gauges in the upper catchment to assist flood mitigation measures. Some stakeholders suggested that the worst-case climate change scenario modelling should be supplemented with additional information around its likelihood of occurring. There were concerns that worst-case climate change scenarios should not be used to inform short-term water allocation decisions.
	**Aboriginal water rights and connection to Country** There was broad support for improving the recognition of Aboriginal people's water rights, interests and access. Aboriginal communities expressed strong disappointment about the lack of engagement in the lead up to the release of the draft strategy.	**Aboriginal water management, business and place-based opportunities** There was widespread support for greater participation of Aboriginal people in water management and for providing more business and place-based initiatives for Aboriginal people and communities. Concerns were raised about the consultation and engagement with Aboriginal communities, as well as the need for greater recognition of the significance of cultural water and understanding of Aboriginal water and land rights.

Theme	Public consultation phase 1	Public consultation phase 2
	**New and existing water infrastructure** There were mixed views about the benefit of water-related infrastructure, with some support for the role of infrastructure in supporting greater economic and water security, but also concern that there should be a greater focus on sustainable resource management and use.	**New and existing water infrastructure** There was both support and concern about the decision not to shortlist infrastructure options (e.g. raising Pindari Dam and diverting water inland from coastal catchments). Some stakeholders suggested there should be further analysis to assess the broader benefits of inland diversion, including energy generation, flood mitigation and connectivity benefits.
	**Environmental health and connectivity** Support for the need to protect the environment and ecosystems and for considering the region as part of the broader Northern Basin.	**Environmental health, ecosystems and water quality** Protecting ecological and environmental outcomes across the region was supported, as was improving understanding of river flows, water use and water quality. There was concern about the ongoing and increasing impacts of climate change on the environment and ecosystems. There was general support for improved transparency around river drought operations and management of environmental water. There were mixed views about implementing the Floodplain Harvesting Policy in its current form, with support for better regulation of floodplain harvesting but concern about the potential for negative environmental, social and cultural impacts.
	Improving connectivity not raised as a key theme in public consultation phase 1.	**Improving connectivity** There was general support for actions aimed at protecting critical needs. However, some stakeholders felt that further environmental and economic analysis would be required to improve water flows across connected catchments and meet the objectives of the strategy. Barriers and floodplain structures were key considerations for in-catchment connectivity.

Theme	Public consultation phase 1	Public consultation phase 2
	**Entitlement reliability and risk management** Most comments related to the potential risks posed by climate change on future water availability and reliability. Stakeholders emphasised that better understanding of these risks would help support development of appropriate mitigation strategies and prepare against a future with less water.	**Water security, reliability and risk management** There was widespread support for adopting farm water-use efficiency measures and for developing a better understanding of how groundwater could support towns when surface water is limited. There was strong concern about increasing the availability of high security water licences due to the potential negative impacts on the environment, licence reliability and general security entitlements.
	**Strategic land and water planning and other reforms** Most comments related to interactions between land and water resources and the risks posed to water resources by different land uses. It was suggested that the regional water strategies need to more closely align with other regional and economic development strategies.	**Compliance** There was a concern that some water users do not comply with the law and that a lack of regulation contributed to misuse of landholder rights and domestic licences.
	**Inter-jurisdictional water management** Concern that the strategy only focuses on the part of the catchment that falls within NSW. It was noted that cross-border water sharing and management arrangements are complex issues.	**Inter-jurisdictional water management and collaboration** There was general support for improving communication and collaboration between the NSW and Queensland governments to ensure that long-term water strategies consider both sides of the border. Concerns were raised that a whole-of-catchment response to water management has still not been developed and about water sharing arrangements across state lines.
	Strategy implementation and oversight was not raised as a key theme in public consultation phase 1.	**Strategy implementation and oversight** The importance of making sure that the strategy is accessible and clear was noted, as was ensuring that the process for deciding on final actions and priorities is transparent and inclusive. There was interest in understanding how the strategy aligns with other long-term plans, strategies and documents.

The following sections summarise the feedback received for each of these themes, as well as for the priorities and proposed shortlisted actions identified in the draft strategy and consultation paper.

About this report

This report summarises feedback received during public exhibition phase 2. The department received 17 formal submissions and over 70 people participated in engagement sessions about the strategy.

Feedback from formal submissions and fillable forms, as well as in-person feedback provided at public information sessions, is summarised in the following sections:

- Feedback by theme
- Feedback on challenges, priorities and actions
- Feedback on options not shortlisted
- Suggested additional actions.

The department has also provided a Response to feedback which explains how the feedback received has been incorporated into the final Border Rivers Regional Water Strategy and Implementation Plan. This is outlined in full at the conclusion of this report.

Image courtesy of Robert Cleary, Department of Planning and Environment.
Ironbark Creek Campground, Kings Plains National Park

Feedback by theme

Feedback by theme

Theme 1: Climate and water data, information and modelling

Feedback focus: Improve availability and understanding of climate and water data, information and modelling.

There was strong support for increasing availability of and access to climate information, data and modelling. Improving flood and water modelling and data, in particular for floodplain flows and unregulated rivers, were also supported. There was support for additional gauges in the upper catchment to assist flood mitigation measures.

Some stakeholders suggested that the worst-case climate change scenario modelling should be supplemented with additional information around the likelihood of it occurring. It was felt that this worst-case scenario should not be used to inform short-term water allocation decisions.

Support	Concern
Access to climate information, data and modelling Support for providing better access to climate and water information and data to help improve people's understanding of climate change impacts and water management decision making. Suggestion to consider how climate information and data can be communicated in an accessible format to help water users, businesses and interested groups to plan for the long-term impacts of climate change. Suggestion for information and data to be periodically reviewed, with updates made, where appropriate, to improve accuracy.	**Access to climate information, data and modelling** Suggestion to provide information about assumptions underpinning the worst-case scenario modelling to provide a better understanding of its likelihood. Transparently communicating and sharing assumptions, limitations and goals of the modelling was considered important. Suggestion for the strategy to consider the likelihood of extreme weather conditions and to include more information on weather volatility and the potential for extreme wet events.

Support	Concern
Installation of gauges to provide better information and data Support for installing new gauges in the upper catchment to assist flood mitigation, e.g. at or near the junction of Bluff River and Pyes Creek and upstream on the Beardy River. Suggestion to improve existing gauges so they can update more efficiently and provide real-time data that may help warn of impending floods. Suggestion for improving understanding of river flows, water use and water quality to inform how government policies and landholders can respond to climate change. It was noted that improving water flow and quality data helps to understand water availability during drought. It can also help local councils to determine what treatment is required before supplying water to towns.	
Water modelling and data improvements Acknowledgement of the work undertaken to improve the modelling and data for the strategy, with strong support for continued improvements as more up-to-date data is made available. Interest in understanding whether flood mitigation had been considered in modelling.	

Theme 2: Aboriginal water management and business and place-based initiatives

Feedback focus: Support participation of Aboriginal people in water management and increase opportunities for Aboriginal-owned and led businesses and place-based initiatives.

There was widespread support for encouraging participation of Aboriginal people in water management and providing greater business opportunities and place-based initiatives.

Concerns were raised about the consultation and engagement undertaken with Aboriginal communities, as well as greater recognition of the significance of cultural water and land to Aboriginal people.

Support	Concern
Increased representation and management Support for relationship and capacity building, with suggestions to appoint local representatives to participate in consultation, decision making and advocacy and to support information and knowledge transfer. Suggestion to prioritise and sufficiently fund the proposed Aboriginal Water Strategy to ensure culturally appropriate consultation processes occur, and to strengthen capacity building and meaningful participation. Suggestion to consider the types of support government can provide to increase Aboriginal involvement in water management to ensure initiatives and programs meet the needs of Aboriginal communities and are sustainable. Suggestion for an independent Aboriginal water interest body to be created to provide a voice for Aboriginal people in water matters, assist in obtaining water-related data for the community, and to assist with navigation of federal and state legislation.	**Increased representation and management** Recognition of the adversity faced by Aboriginal people and the need to respect Aboriginal knowledge and needs in relation to water planning and management. There was concern that adequate progress had not been made to increase Aboriginal representation and involvement in water management.

Support	Concern
Consultation processes Recommendation for greater involvement of elders, youth and the broader community to ensure Aboriginal knowledge and input is incorporated into the strategy. Ensuring that consultation occurs across regions and communities was viewed as critical, due to geographic and community nuances. Suggestion that future engagement processes include school students to provide an opportunity to learn about local culture and ways to protect it.	**Consultation processes** Concern about the lack of notification of public exhibition events, and that this limited the ability of communities to participate. Concern that consultation did not ensure that Aboriginal voices were heard and listened to. Suggestion for a more consistent approach to the way government agencies consult with Aboriginal communities. Request for cultural protocols to be respected in future consultation.
Placed-based cultural outcomes for Aboriginal people Suggestion for a cultural assessment to be undertaken to understand the significance of water sources and to identify possible measures to protect them.	**Placed-based cultural outcomes for Aboriginal people** Concern that the cultural and spiritual significance of rivers and water to Aboriginal people has not been recognised. Request for more information/clarity about cultural access licences, including how they can be obtained and what they can be used for. Noted that there is a need to recognise that different sites have different cultural values, e.g. some locations are for men's business and others for women's business.
Increased business and economic opportunities Widespread support for measures aimed at building skills and creating business and employment opportunities.	**Increased business and economic opportunities** Concern raised by Aboriginal communities that water for business-related purposes is unaffordable and that Cultural Water Access Licences should also apply to commercial activities.
Understanding water licence and land rights Suggestion to communicate that the objects of the Water Management Act include benefits to Aboriginal people.	**Understanding water licence and land rights** There is a need for greater education about how to access water licences and to understand what licence can be used for. Noted that there have been instances where communities have unintentionally relinquished water licences due to a lack of understanding. There is a need for a greater clarity and information about landholder and water licence holder rights. Desire for improved access to travelling stock reserves, as cultural practices take place in these locations. It was suggested that these be jointly managed by Local Aboriginal Land Councils and other relevant agencies.

Theme 3: New and existing water infrastructure

Feedback focus: Explore challenges and opportunities for new and existing major water infrastructure, such as dams, weirs and pipelines.

There were mixed views about the decision not to shortlist infrastructure options in the strategy. Some stakeholders suggested that there should be further analysis on the advantages of an inland diversion scheme, including assessing any energy generation, flood mitigation and connectivity benefits.

Support	Concern
Infrastructure options not shortlisted Some support for the decision not to shortlist options to build a new Mole River Dam, divert water inland, enlarge Mungindi Weir, and raise Pindari Dam, due to concern about ecological and environmental impacts.	**Infrastructure options not shortlisted** Some concern that none of the major infrastructure options identified in the earlier longlist of options were progressed to shortlisted actions. These include Mole River Dam, raising Pindari Dam and the inland diversion scheme. Some people asked for more information about the infrastructure options assessment process, to ensure it had been comprehensive enough to consider broader flood mitigation, energy generation and connectivity benefits. It was noted that it can be difficult for infrastructure options to meet viability requirements using standard cost benefit analysis approaches.

Theme 4: Environmental health, ecosystems and water quality

Feedback focus: Protect and enhance environmental health, with consideration and action to support the impacts of a changing climate.

Protecting ecological and environmental outcomes across the region were supported, as was improving understanding of river flows, water use and water quality.

There was concern about the ongoing and increasingly damaging impacts of climate change on the environment and ecosystems. There was general support for improving transparency around river drought operations and managing environmental water.

There were mixed views about implementing the Floodplain Harvesting Policy in its current form due to environmental, social and cultural concerns. This was balanced, however, by some support for better regulation of floodplain harvesting.

Support	Concerns
Protection of native fish Support for actions aimed at supporting native fish populations, such as installing fishways and mitigating the impacts of cold water pollution, and recognition of measures in the Northern Basin Toolkit aimed at supporting the health of native fish.	**Protection of native fish** Concern that Cunningham's Weir is still blocking fish passage.
Environmental water management Support for improving the management of environmental water and establishing an Environmental Water Advisory Group to advise about management of environmental water. Suggestion for the strategy to consider 'piggybacking' environmental water on top of natural flows.	**Environmental water management** Concern that full recovery of environmental water, as required under the Basin Plan, has not been achieved.

Support	Concerns
Impacts of water management and climate change on water for the environment Suggestion that the ratio of environmental and consumptive supplementary flows could alter, based on whether conditions are wet or dry.	**Impacts of water management and climate change on water for the environment** Concern about the impacts of climate change on land and water management, and subsequent impacts on the environment. Concern that poor water management has contributed to erosion of environmental and cultural values. There was a concern that valley extraction limits are being exceeded and that this may worsen as the climate becomes more extreme. There was further concern about the impact this may have on low-flow and cease-to-flow events.
Improved transparency around river drought operations There was support for prioritising actions that help people to understand how rivers are operated during droughts. Support for delivery of environmental water during drought. Suggestion that available water determinations should be based on the most recent drought of record to ensure that human needs and environmental needs are adequately considered. Support for updating the Border Rivers Incident Response Guide and preparing a Border Rivers Valley Drought Management Plan to clarify when, how and why drought operations are triggered.	**Improved transparency around river drought operations** Suggestion for further consideration about how relying on groundwater for communities and towns might impact environmental water delivery and surface groundwater interactions. Concern that drought operation measures, such as block releases and shutting down the river at Boggabilla, may cause ecological harm.
NSW Floodplain Harvesting Policy Qualified support from some for implementing the NSW Floodplain Harvesting Policy, provided it is clear how floodplain harvesting will be measured and monitored. Support for ensuring that any cumulative environmental impacts of floodplain harvesting are thoroughly assessed and addressed prior to implementation.	**NSW Floodplain Harvesting Policy** Concern at the potential environmental impacts of implementing the NSW Floodplain Harvesting Policy. Concern that the NSW Floodplain Harvesting Policy does not prioritise the environment. Suggested that critical drought refugia should be mapped, and unapproved floodplain structures remediated, before the NSW Floodplain Harvesting Policy is implemented and floodplain harvesting licences are granted.

Support	Concerns
Vegetation and environmental health Sustaining the health and resilience of natural ecosystems was seen as a priority. It was considered important to ensure land management does not negatively impact the environment.	**Vegetation and environmental health** Concern that landowners cannot rely on governments to adequately conserve riparian, wetland and floodplain vegetation. Suggestion that the strategy should identify sites as well as provide funding to rehabilitate sites.

Theme 5: Improving connectivity

Feedback focus: Undertake actions that protect and improve connectivity within and beyond the catchment.

There were mixed views about options and actions in the strategy aimed at improving connectivity. While there was general support for protecting critical needs, there were also calls for further economic and environmental analysis to ensure that measures designed to improve water flows across connected catchments met proposed objectives.

Barriers and floodplain structures were considered key to improving catchment connectivity.

Support	Concern
In catchment connectivity - physical barriers General support for measures aimed at addressing the physical barriers to improving connectivity. Suggestion that the emphasis of this action should be on removal, rather than identification and investigation, as the barriers are already well known. Suggestion to prioritise ways of enabling natural delivery of water and to address the full recovery and regeneration of the Morella watercourse.	**In catchment connectivity - physical barriers** Concern that the proposed removal of floodplain structures would be restricted to unapproved works, which would not address other structures that alter flood flows and/or have adverse social, economic, environmental and cultural impacts.
Environmental and cultural outcomes Support for connectivity to improve ecological and environmental outcomes, such as riverine productivity, water quality, and native fish and aquatic animal populations. Social, cultural and recreational benefits of improved connectivity were also noted. Suggestion for greater inclusion of Aboriginal outcomes when considering connectivity. Identified need to maintain and, if possible, improve connectivity within unregulated streams in the upper and middle catchment in times of drought. Suggestion to extend the concept applied in Tenterfield Creek that requires that after a stream has ceased to flow, pumping is not permitted for 24 hours.	

Support	Concern
Connectivity with the Western Regional Water Strategy – movement across catchments General support for investigating ways to improve connectivity with the Barwon-Darling.	**Connectivity with the Western Regional Water Strategy – movement across catchments** Suggestion for greater consideration of movement across water catchments and the associated impacts on water users. Request for the strategy to provide greater assurance that very low-flows and cease-to-flow periods in the Barwon are close to their natural frequency and duration. Suggestion for government to consider strategic purchase of licences to help deliver water downstream rather than deteriorate reliability of licences through rule changes.
Temporary water restriction triggers Suggestion that if triggers are used, their purpose and nature should be clearly communicated. Decision making around triggers must be transparent. It is important for the community to understand and be aware when access is being restricted and when restrictions are likely to be eased.	**Temporary water restriction triggers** Concern that the timeframe for water restrictions to be implemented in times of extended drought (30 days of no-flow) is too long. Suggestion for the strategy to address the potential for fish deaths resulting from triggers. Query about whether triggers and thresholds will be applied to floodplain harvesting. Suggestion for greater clarity around first flush rules and access arrangements for unregulated users.
Menindee Lakes 195 GL trigger Support for improved connectivity to Menindee Lakes and the Lower Darling, noting that the proposed trigger outlined in the draft Western Regional Water Strategy of 195 GL in Menindee Lakes was considered too low. General support for the objective of securing up to 12 months of water in the lower Darling. Support for greater transparency and accountability around release of water from Menindee Lakes.	**Menindee Lakes 195 GL trigger** Concern that a 195 GL trigger was not sufficient to protect critical human or ecological needs in the lower Darling. Concern that, due to the distance of the Border Rivers from the Menindee Lakes, the department may not be able to accurately calculate whether flows from a particular rainfall events would be required before it flows past. Concern that the storage of Menindee Lakes may be impacted by management of the lakes, which falls outside the control of the northern basin.

Theme 6: Water security, reliability and risk management

Feedback focus: Identify efficient, locally-appropriate opportunities to manage water risk and reliability.

There was widespread support for adopting farm water-use efficiency measures and for developing a better understanding of how groundwater could support towns when surface water is limited.

There were mixed views about water licences and allocations and about whether the water management framework can improve water access reliability for sustainable economic diversification.

There was strong concern about increasing the availability of high security water licences due to the potential negative impacts on the environment, licence reliability and general security entitlements.

Support	Concerns
Water security for towns Support for actions in the strategy that aim to provide greater understanding of how groundwater can provide town water supply when surface water is limited. Noted that information about groundwater is useful for local councils to assist in planning for temporary water restrictions and for water saving measures during drought.	**Water security for towns** Concerns about the potential health impacts of drinking groundwater. Some concern that lack of available water can impact the ability to defend against bushfires. Suggestions for old dams on reserves or mine sites to be cleared to provide accessible water, particularly in the Torrington Reserve.
Water security and availability Support for and acknowledgement of government efforts to ensure water security for a range of purposes in the Border Rivers region. Variability in water use and availability was mentioned, noting the desire for greater consistency in the available yearly amount to assist with business operations.	**Water security and availability** Mixed views about water licences and allocation. Some support for increasing licences for industry, while others asked for water licensing inequalities to be addressed. Suggestion for the strategy to consider the value of water during drought and the cost of damage during floods, to better inform decisions around water infrastructure.

Support	Concerns
Licence conversions Suggestion that if general security to high security licence conversion is permitted, it should be used to create high security that property owners could use to establish a small permanent crop, or a crop that needs to be grown for several years, to diversify their income. Suggestion that government should consider enabling water users to have a capacity share in water storages, rather than exploring licence conversions. This option would require further consultation and analysis before progressing.	**Licence conversions** Minimal support for general security to high security licence conversion. Concerns focused on impacts on the environment, reduced security for other licence holders, prioritisation of local agriculture use over downstream environmental and human needs, reliability and market value. Suggested that further analysis into the potential market impacts of increasing the availability of high security water licences be conducted prior to taking any action. Concerns about water availability, noting that if assumptions on future inflows do not accurately reflect the variability in water availability, any increase in high security licences would create additional stress on the system. Any analysis or assessments made about conversion of licence should be consulted on and made public.
Groundwater extraction General support for investigating sustainable levels of extraction. However, for some, only conditional support was expressed, with a request that no decisions on groundwater are made before the NSW Groundwater Strategy is finalised to ensure consistency at a regional and state level. Support for towns establishing groundwater as an alternative drinking water supply for when surface water is limited. Support for improving knowledge of fractured groundwater sources in the upper catchment.	**Groundwater extraction** Concern about increasing in the groundwater sustainable diversion limit, as climate change may make these levels unsustainable. In setting limits, the significant drawdown of groundwater sources during the recent drought must be considered. Suggestion that towns must actively pursue water from non-rainfall dependent water sources, such as recycled water, as an alternative to groundwater.
Sustainable economic diversification and prosperity Noted that the Moree Special Activation Precinct (SAP) and Inland Rail will provide economic and social opportunities for the Border Rivers region. Suggestion for greater investment in natural resource management and monitoring to generate local and regional employment.	**Sustainable economic diversification and prosperity** Concern about the difficulty in defining ‘sustainable’ in this context and therefore in ensuring sustainable diversification and prosperity. Suggestion that any diversification of regional industries should not include permanent plantings as rainfall is too unreliable for this purpose.

Support	Concerns
Water use efficiency	
Support for continued investment in more efficient irrigation technology to reduce flood irrigation practices.	
Suggestion for further investigation into a range of options for subsurface irrigation technology and evaporation control, including investigating floating solar panels on on-farm storages to reduce evaporation.	

Theme 7: Compliance

Feedback focus: Concern water users are not complying with licence conditions.

There was a concern that some water users do not comply with the law and that a lack of regulation contributed to misuse of landholder rights and domestic licences.

Support	Concerns
Compliance and regulation Support for greater understanding of how fee payments are used by government to deliver water management activities, such as planning and compliance.	**Compliance and regulation** Concern about water users not complying with the law. Concern that stock and domestic licences are being misused or overused due to a lack of regulation.

Theme 8: Inter-jurisdictional water management and collaboration

Feedback focus: Improve collaboration, information sharing and alignment of strategic and operational water management across Queensland and NSW.

There was general support for improving communication and collaboration between the NSW and Queensland governments to ensure that long-term water strategies consider both sides of the border.

Concerns were raised that a whole-of-catchment response to water management has still not been developed and about water sharing arrangements across state lines.

Support	Concerns
Increased communication and collaboration between NSW and Queensland Suggestion to include an action in the strategy to encourage communication between Queensland and NSW local councils, particularly in regard to water extraction and implementation of temporary water restrictions during droughts. Noted that it will be difficult to develop a cohesive plan until cross border issues have been resolved.	**Increased communication and collaboration between NSW and Queensland** Acknowledgment that engagement occurs at an officer level across jurisdictions, but concern that a whole-of-catchment response has not been developed. Noted that the value of successful partnerships, such as the Glenlyon Dam and the Border Rivers Commission, should be recognised by the NSW Government. As not all the water that the Border Rivers catchment supplies to the Barwon Darling originates from NSW, there was concern that water management in Queensland could impact on NSW ability to meet connecting flows.

Theme 9: Strategy implementation and oversight

Feedback focus: Ensure the final strategy assesses a range of factors when determining implementation, evaluation, and review.

The importance of making sure that the strategy is accessible and clear was noted, as was ensuring that the process for finalising actions and priorities is transparent and inclusive.

There was interest in understanding how the strategy aligns with other long-term plans, strategies and documents.

Support	Concerns
Consultation processes and strategy development timeframe The strategy should be regularly reviewed (e.g. every 5 years) and amended to incorporate new information, as appropriate. Noted that many stakeholders and communities hold local knowledge that can continue to be drawn on as the strategy is finalised and implemented.	**Consultation processes and strategy development timeframe** Concern at the pace of development of the strategy, with calls for more time to enable wider engagement before the strategy is finalised. A more collaborative and extended engagement period was seen as important, to ensure informed feedback is given and the best outcomes for the region can be achieved. A desire to strengthen local leadership capacity to support the design of strategies, policies and programs that are based on communities' needs. Concern that voices and issues raised around issues such as floodplain harvesting have not been heard, impacting trust between community and stakeholders and the government.

Support	Concerns
Transparent decision making and options assessment Suggestion for greater transparency around how options and actions are assessed and decisions made. Collaboration between community and the department was supported.	**Transparent decision making and options assessment** Concern about the process for assessment of the long list of options presented in the 2021 draft strategy. Concerns were raised that infrastructure options from the long list had not been sufficiently explored and assessed. Cultural assessment should be added to the assessment framework to understand the cultural significance of water sources. Concern that the analysis undertaken to date has not adequately considered all community, environmental and economic perspectives. For the strategy to be sufficiently informed and for analysis to be accurate, greater consideration of economic, social and environmental factors is needed, alongside information from local and social researchers.
Link between strategy and other documents and strategies Suggestion for the following strategies currently being developed under the State Water Strategy to be finalised prior to the implementation of the Border Rivers Regional Water Strategy to ensure regional consistency: • Aboriginal Water Strategy • NSW Groundwater Strategy • Western Regional Water Strategy • Town Water Risk Reduction Program • Water Efficiency Framework and Program. Suggestion for information to be provided about how the actions in the strategy will interact with the review of the Basin Plan. Suggestion for the Final Report: Independent Assessment of Social and Economic conditions in the Murray Darling Basin (April 2020) to be considered and used to inform the strategy.	

Feedback on challenges, priorities and actions

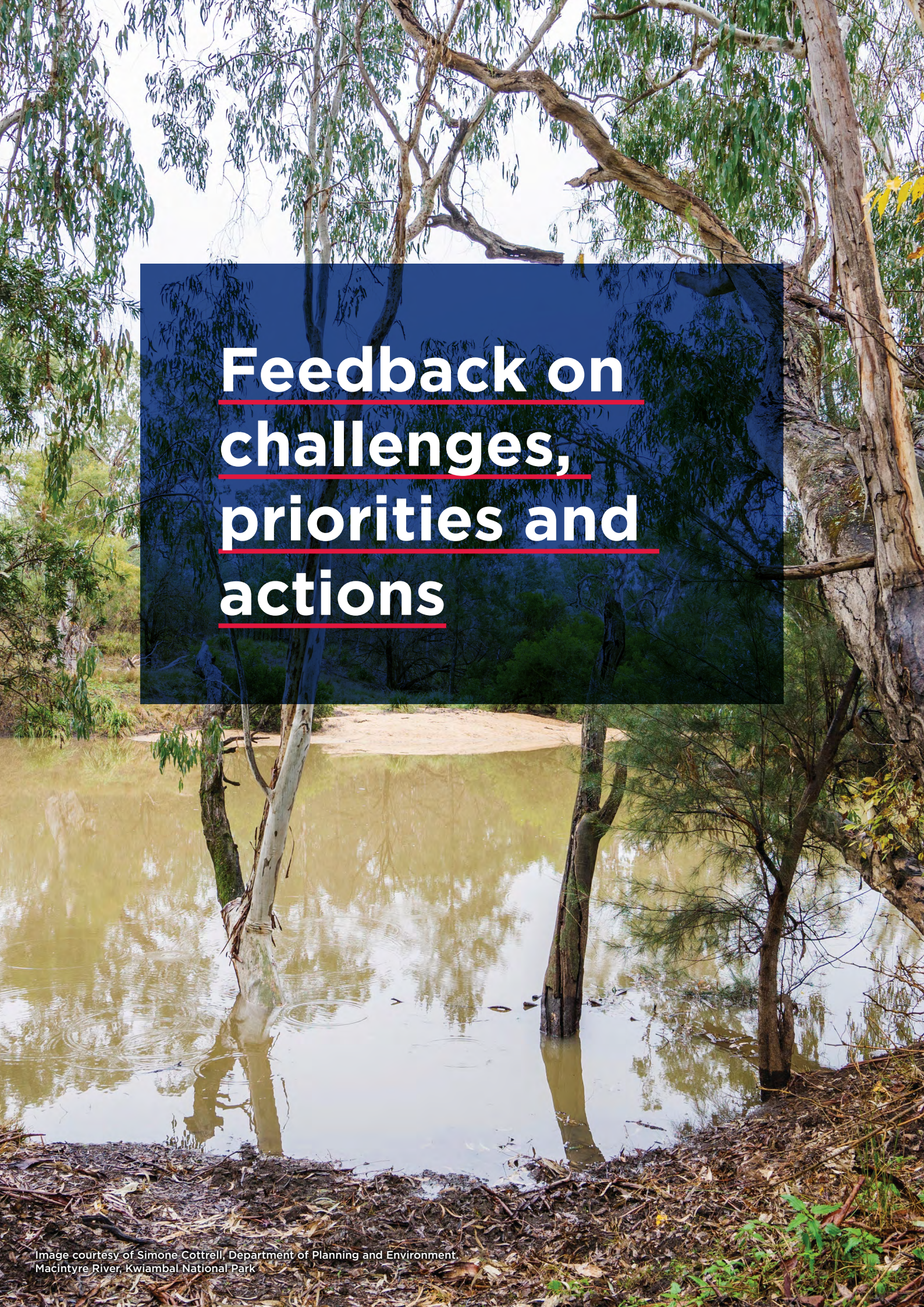


Image courtesy of Simone Cottrell, Department of Planning and Environment.
Macintyre River, Kwiambal National Park

Feedback on challenges, priorities and actions

The Border Rivers Regional Water Strategy consultation paper identified 4 priority areas and a number of shortlisted actions to address regional challenges. The Border Rivers regional priorities are:

1. Address knowledge gaps and make information easily accessible
2. Do more with less water
3. Make the region more resilient to climate variability
4. Share water differently to address the critical needs of Border Rivers and downstream users

There was broad support for the 5 regional water challenges identified in the strategy, with some feedback that there may need to be a stronger focus on climate change scenarios that focus on wetter periods and flooding.

Below is a summary of the feedback received on the priority areas and proposed shortlisted actions for the Border Rivers region:

Priority 1: Address knowledge gaps and make information easily accessible

The actions shortlisted under this priority will:

- fill knowledge gaps
- make information more accessible so Aboriginal people, water managers and users have access to the right amount of information at the right time to help them make decisions.

There was strong support for this priority area from those who provided feedback about one or more of the proposed actions.

Actions nominated by respondents as a priority for implementation are denoted as such in the table below.

Actions		Comments
1.1	**Improve public access to climate information and water availability forecasts**	Strong support for making information accessible to all water users.
1.2	**Develop ongoing arrangements for participation of local Aboriginal people in water management**	Strong support for increased participation and representation of Aboriginal people in water management, with a recommendation for the Aboriginal Water Strategy to be finalised.
1.3	**Improve understanding of river flows, water use and water quality at priority locations in the Border Rivers**	Strong support for improving understanding of river flows, water use and water quality, noting this action is of particular importance for flood events and to assist local councils in determining treatment of water required before supplying to towns. There was a request for additional gauges in the upper catchment to help provide better warning and management of floods.
1.4	**Invest in continuous improvement in water modelling in the Border Rivers region**	Strong support for improving our current water modelling to incorporate our new climate data.

Priority 2: Do more with less water

The actions shortlisted under this priority will:

- use water more efficiently
- achieve shared benefits from water delivery and maximise social, cultural, economic and environmental outcomes when water is used.

There was strong support for this priority area from those who provided feedback about one or more of the proposed actions.

Actions nominated by respondents as a priority for implementation are denoted as such in the table below.

Actions		Comments
2.1	**Support adoption of on-farm water use efficiency measures**	Strong support for adoption of on-farm water use efficiency measures and increasing investment in developing efficient irrigation technologies to move away from flood irrigation and minimise evaporation were supported.
2.2	**Coordinate the management of irrigation water releases and water for the environment to improve ecological outcomes**	Widespread support expressed, with a suggestion for an Environmental Water Advisory Group to be established to support this action. *This action was nominated as a priority for implementation.*
2.3	**Identify and address physical barriers to the delivery of water for the environment**	Strong support expressed, with a suggestion to emphasise removal, rather than identification only. *This action was nominated as a priority for implementation.*
2.4	**Provide clarity and certainty for environmental needs during drought operations**	Widespread support but some concern about the attempt to include critical industries in drought management strategies, rather than focusing on human and environmental needs. *This action was nominated as a priority for implementation.*

Priority 3: Make the region more resilient to climate variability

The actions shortlisted under this priority will:

- encourage agricultural diversification through investigating increasing the availability of high security licences
- explore opportunities to make sure the water entitlement and access framework can cater to the development of emerging industries
- support Aboriginal people to be more involved in water management, by both sharing their traditional knowledge and contributing to decision making
- reduce the impact of infrastructure and land management on fish and water dependent ecosystems.

There was general support for this priority area from those who provided feedback about one or more of the proposed actions, with the exception of action 3.1 which was widely opposed.

Actions nominated by respondents as a priority for implementation are denoted as such in the table below.

Actions		Comments
3.1	**Increase the availability of high security water access licences**	Strong opposition due to concerns about impacts to water security for other licence classes and impacts on the environment. While it was recognised that improving water security played a large role in attracting investment and growth, there was concern that this action would have a major impact on the environment.
3.2	**Ensure the water management framework can support sustainable economic diversification**	General support for supporting sustainable economic diversification, but some concern over the inclusion of water-intensive permanent plantings due to irregular rainfall patterns in the area and a desire to understand the definition of sustainability.
3.3	**Support place-based initiatives to deliver cultural outcomes for Aboriginal people**	General support for place-based initiatives aimed at delivering cultural outcomes. Noted that travelling stock routes are important for economic activity with a suggestion that they should be jointly managed by Local Aboriginal Land Councils and local government.
3.4	**Support Aboriginal business opportunities in the Border Rivers region**	Widespread support for Aboriginal business opportunities across the region.

Actions		Comments
3.5	**Mitigate the impact of water infrastructure on native fish**	Widespread support for removing structures that impede fish passage and implementing fish-friendly infrastructure. Mitigating cold water pollution was also identified as a risk to fish health. *This action was nominated as a priority for implementation.*
3.6	**Fully implement the NSW Floodplain Harvesting Policy**	Mixed views about fully implementing the NSW Floodplain Harvesting Policy, with concerns this could result in unsustainable levels of floodplain diversions and calls for a better understanding of the cumulative environmental, social and cultural impacts of implementing the policy. However, there was support for regulation and communication about measurement and regulation of floodplain harvesting. *This action was nominated as a priority for implementation.*
3.7	**Remediate unapproved floodplain structures**	General support for remediating unapproved floodplain structures, noting that this action should be finalised before floodplain harvesting works are licenced. *This action was nominated as a priority for implementation.*
3.8	**Identify significant riparian, wetland or floodplain reaches to protect or rehabilitate**	General support for this action with a suggestion to go beyond 'identify' to actual rehabilitation. *This action was nominated as a priority for implementation.*

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

The actions shortlisted under this priority will:

- build knowledge of the critical needs of the region
- secure water sources for towns
- make water policy and water determinations adaptable in response to changing climate conditions
- investigate ways to improve connectivity within the system and with the Barwon-Darling River.

There was widespread support for this priority area from those who provided feedback about one or more of the proposed actions.

Actions nominated by respondents as a priority for implementation are denoted as such in the table below.

Actions		Comments
4.1	**Map critical drought refugia**	General support for mapping critical drought refugia, which will help to protect native fish populations and other water dependent species. It was noted that while mapping refugia was supported, these could change over time and this would need to be an ongoing task. *This action was nominated as a priority for implementation.*
4.2	**Support towns to understand if groundwater can provide a reliable water supply when surface water availability is limited**	General support expressed, noting that decisions on groundwater should not be made until the NSW Groundwater Strategy is finalised. *This action was nominated as a priority for implementation.*
4.3	**Investigate innovative projects to support bushfire efforts**	General support expressed, noting the importance of adequate water supply to fight bushfires and the need for alternative approaches, such as cleaning out old dam or mine sites, to provide accessible water. *This action was nominated as a priority for implementation.*
4.4	**Investigate sustainable levels of groundwater extraction in the Border Rivers Alluvium and the Great Artesian Basin aquifers**	General support expressed, again noting the importance of finalising the NSW Groundwater Strategy prior to changes being made. Concern was expressed about groundwater sources being depleted across the state.

Actions	Comments
4.5 Investigate ways to improve connectivity with the Barwon-Darling on a multi-valley scale	Stakeholders acknowledged the need to improve connectivity with the Barwon-Darling. Water users wanted a better understanding of how the options proposed to improve connectivity would impact their water access. It was also noted that it was important to improve connectivity within the catchment to support ecological outcomes as well as end of system flows. *This action was nominated as a priority for implementation.*

Feedback on options not shortlisted

Some respondents provided feedback on options that had not been shortlisted from the original long list:

Options	Feedback
Option 1 Mole River Dam	Mixed views about Option 1, with support for Mole River Dam not being shortlisted as an action, due to ecological consequences. However, there was concern that the assessment process was not rigorous or consultative enough with irrigator beneficiaries. Concern was also raised about limited access to information about the Mole River Dam Business Case.
Option 2 Raise Pindari Dam	Mixed views about Option 2, with support for raising Pindari Dam not being shortlisted as an action, due to ecological consequences. However, there was concern that the option was not shortlisted to provide additional storage. There was also a request for further information about the assessment process to be made available.
Option 4 Piping water to stock and domestic users in the unregulated section of the Boomi River	Support for Option 4 not being progressed, as the water released to supply domestic users also has environmental values.
Option 8 Inland diversion from the East	Mixed views about Option 8, with support for inland diversions not being shortlisted as an action, due to ecological consequences. However, there was concern that the assumptions and analysis underpinning this decision should be more widely communicated. There was a request for further discussion about inland diversion and for more analysis about potential benefits to Barwon-Darling connectivity, flood mitigation benefits on the coast, and energy generation.
Option 21 Active management to protect water for the environment in unregulated rivers	Concern that Option 21 was not shortlisted, with a suggestion to investigate the scope for a broader application of active management.

Suggested additional actions

Some respondents nominated additional actions for consideration as part of the feedback process:

Actions	Feedback
End of system triggers and cease-to-pump events	Suggestion for actions to include protection of environmental releases to end of system and protecting more of the smaller tributary inflows. Support for restricting pumping for 24 hours following cease-to-flow (as is applied to Tenterfield Creek).
Inter-jurisdictional communication	Suggestion for an action to promote communication between councils to reduce miscommunications between different jurisdictions, e.g. about water extraction and implementation of temporary water restrictions.

Image courtesy of CWP Renewables.
Sapphire Wind Farm, Northern Tablelands NSW

Response to feedback

Response to feedback

The development of regional water strategies has been a multi-year, multi-step process. Consultation with a range of stakeholders has been fundamental in building our understanding of the key challenges the Border Rivers region is facing and in identifying the actions we can undertake that are best suited to addressing these challenges.

The initial phase of regional water strategy development helped the NSW Government identify issues that are consistent challenges across the state. These state-wide issues have been included as priority focus areas in the NSW Water Strategy.

Many options that were identified in the first draft of the Border Rivers Regional Water Strategy have become part of the implementation priorities of the State Water Strategy because of their broader implications for water management. For the same reason, other options will be progressed through the NSW Groundwater Strategy and the Aboriginal Water Strategy when they are finalised.

The Border Rivers Regional Water Strategy and Implementation Plan take into account the challenges, priorities and actions that are covered within these other strategies. There has been ongoing collaboration to ensure that consistency and timing is built into the implementation of the Border Rivers Regional Water Strategy.

Your feedback has been used to refine the actions and help us to prioritise implementation timing.

Publication and use of new climate change data and hydrologic modelling

Regional resilience and the ability to respond effectively to the impacts of climate change remain a high priority for stakeholders. The proposed actions were strongly supported; however, there were some concerns about the application of a 'one-size fits all' assessment and the use of 'worst-case scenario' modelling.

The worst case climate change data set used in the regional water strategies is not a forecast of how climate change is expected to eventuate, but it is one possible future outcome. This scenario may not occur but using this 'worst-case' scenario helps us to plan strategically and to focus on the key challenges facing a region. It also helps us understand how different options might work in a very dry climate in the future.

This longer-term worst case scenario may not be appropriate for implementing short term actions. We will need to complete more refined assessments of climate change risk when we implement many of the regional water strategy actions. These additional assessments will be based on both the action's planning horizon and the latest climate science.

The new climate datasets and updated modelling that underpins the Border Rivers Regional Water Strategy are an important advance on previous climate work as it goes beyond European historical records. We can now assess the likelihood of a range of drought conditions as well as impacts to surface water security and reliability over a greater range of climate conditions. The models can also provide, in the future, guidance on the significance and magnitude of floods that have occurred in the past.

Making this data available in a usable format will be critical for the community, local councils and water utilities, businesses, environmental interests and landholders, to make better decisions regarding water and is a priority for the NSW Government. The stochastic datasets for rainfall and potential evapotranspiration for several NSW regions, including the Border Rivers, can now be accessed on the Sharing and Enabling Environmental Data (SEED) data sharing hub[1].

We will review existing monitoring programs and data to identify key information gaps and continue to invest in technologies and monitoring that can provide additional information about water quality and water

1 *https://datasets.seed.nsw.gov.au/dataset/water-modelling-stochastic-climate-data*

flows at priority locations that could be used to inform planning and management for these systems. Targeting known gaps would include installing a river gauge at Bluff River and/or other strategic locations in the upper catchment for better local flood risk information, and better water management further down the system.

We will also continue to invest in science and modelling approaches including those that enable us to better understand movement of water across the floodplain, and the return of floodwater from the floodplain back into the river. This is a first step to developing within-flood event forecasting capabilities.

Aboriginal water management, business and place-based initiatives

Strong support for recognising Aboriginal people's water rights, interests and access to water remains a key theme, as does ensuring that Aboriginal knowledge and experience are integrated into long-term land and water management.

In response, the NSW Government is developing an Aboriginal Water Strategy which will provide a state-wide framework and priorities to improving Aboriginal people's rights and access to water.

The Border Rivers Regional Water Strategy will support these priorities through 3 place-based actions to support Aboriginal communities. The priorities for the Border Rivers are to:

- establish local level governance arrangements
- maintain cultural knowledge with on-ground projects
- identify and address local access to Country issues.

Implementing these actions will support participation of Aboriginal people in water management, encourage increased opportunities for Aboriginal owned and led businesses, and place-based cultural initiatives. Establishing an effective governance, engagement and knowledge sharing process is the first step to fundamentally improving Aboriginal people's involvement in water management.

New and existing water infrastructure

There were mixed views about the decision not to shortlist any infrastructure options including a new dam on the Mole River, raising the height of Pindari Dam or building an inland diversion scheme. There was strong support for not progressing these infrastructure options due to the environmental impacts they would cause. There were concerns about the processes used to assess the options and the limited availability of assessment results.

Infrastructure options were assessed in accordance with NSW Treasury Guidelines. Under these guidelines the benefits of an option are assessed based on how it changes the outcomes in a 'base' case. The base case is developed by reflecting existing economic activity, physical infrastructure and operating rules. The options were assessed on how they changed the base case for extractive water users, such as improvement in reliability under a variety of scenarios. These changes were quantified in dollar terms so the options could be compared. More detail on the analysis of these projects has now been published in the following reports:

- Border Rivers RWS – Economic basecase
- Border River RWS – Detailed economic assessment
- Border Rivers RWS – Hydrologic analysis of options.

Inland diversion scheme

During consultation we received criticism that analysis undertaken on infrastructure options should have considered the broader social, community and environmental benefits. We heard that the inland diversions scheme should have also assessed:

- flood mitigation benefits to the coast
- connectivity benefits to the Barwon Darling
- energy generation benefits from incorporating a pumped hydro scheme.

In response to the concerns raised we undertook additional analysis on this

scheme. The outcomes of this analysis have been published[2]. In summary it found that this scheme would:

- reduce, but not eliminate, impacts on Border Rivers licence holders from the connectivity options in the draft Western Regional Water Strategy
- not be capable of providing flows to Barwon-Darling in quantities needed during ecologically important times
- be unlikely to significantly reduce high flows in the Clarence Valley and so may not provide meaningful flood mitigation benefits, but could have significant impacts on low flows
- have limited potential to generate hydropower.

Environmental health, ecosystems and water quality

Feedback on the draft Border Rivers Regional Water Strategy supported and accepted that ecosystem health, including water quality, were important to the region to ensure economic, social and community wellbeing. Many submissions reinforced the need for a holistic approach to ecosystem management.

We acknowledge that for this to be achieved there needs to be an integrated approach to addressing activities that impact river systems such as land management and the riparian zone. To maintain and improve ecosystem health and water quality, it is important to understand all aspects of the flow regime. It also requires the coordination and cooperation of multiple government agencies to make improvements, including planning for the impacts of climate change and variability.

The new climate data sets and our improved understanding of potential future droughts will enable us to better manage periods of drought and the role of water for the environment and critical human needs. This can improve transparency through updating the Border Rivers Incident Response Guide and the development of a Border Rivers Drought Management Plan, which will provide clarity on how the river is operated during drought conditions.

Removal and /or modifications to instream and floodplain structures will mitigate impacts on connectivity and improve aquatic environments.

The implementation of the NSW Fish for the Future Program will remediate fish passage at 9 priority sites and the Improving Floodplains Connection Program will remove or remediate unapproved structures in priority areas in the Border Rivers floodplain that are altering the flow of floodwaters in the region and potentially impeding the delivery of water to ecological assets and floodplain areas.

The implementation of the floodplain harvesting reforms will further support strategic land and water planning by providing a regulatory and compliance framework that captures all forms of take. It will ensure that water is provided into the system to sustain environmental and connectivity needs of the valley and the Murray-Darling Basin.

In addition, Local Land Services are implementing a range of programs to improve natural resource management in the Border Rivers. They will work to identify priority sites in the Border Rivers region to focus riparian and floodplain rehabilitation efforts.

Floodplain Harvesting

The licensing framework for floodplain harvesting commenced in the Border Rivers on 15 August 2022. Under the new rules, floodplain harvesting is not permitted unless water take is accurately measured.

Licensing and managing floodplain harvesting within legal limits will deliver environmental and downstream benefits by reducing floodplain harvesting take to within the water source legal limits and is expected to deliver up to 15 GL increase in average annual flood volume across the Border Rivers floodplain in years when floods occur.

As part of the reform, unprecedented statutory protections will be introduced to

2 https://water.dpie.nsw.gov.au/plans-and-programs/regional-water-strategies/what-we-heard/border-rivers-regional-water-strategy

prohibit floodplain harvesting take when there is less than 195 GL being stored in Menindee Lakes, until rivers are again running close to their full capacity.

The proposed licensing framework allows floodplain harvesting licence allocations and water sharing plan rules to be changed based on improved data and information without triggering compensation under the *Water Management Act 2000.*

The core recommendations of the Select Committee Inquiry into Floodplain Harvesting were to restrict, manage and measure floodplain harvesting within legal limits in water sharing plans and under the Basin Plan. This cannot be achieved without licensing.

The Murray-Darling Basin Authority have now published their independent assessment of revised models for the Border Rivers[3] validating the work of the NSW Government.

Improving connectivity

The NSW Government is exploring ways to improve connectivity at important times through the Draft Western Regional Water Strategy. Actions that seek to improve flows need to be targeted and realistic. Our data tells us that there have always been extreme dry conditions and periods of no flow in the Barwon-Darling. It is not possible through management to maintain a constantly flowing river and we have limited ability to break up drought-induced extended cease-to-flow periods. As such, the connectivity actions proposed in the Western Regional Water Strategy focus on enabling water to flow across connected river valleys and downstream at important times for specific achievable outcomes. Further analysis on connectivity options is being undertaken and will be presented in the Final Western Regional Water Strategy. It is anticipated that the relevant connectivity actions will be considered as part of the water sharing plan for the Barwon-Darling Unregulated River Water Source 2012 review in 2023.

Water security, reliability and risk management

During consultation, there was strong support for actions to enable water users to better manage their own water security risks. We heard access to timely information is important and the section on climate change and hydrologic modelling outlines the work we will do to provide water users with access to better information to help them manage risks.

We recognise that there are a variety of mechanisms that ensure water security and reliability is placed within risk-based decision-making frameworks. We acknowledge that some of these mechanisms are the responsibility of government to provide the framework under which people who have an interest in water can make decisions about their own risk in water security and reliability.

It is the government's role to ensure that there is appropriate planning for droughts and floods that enables economic diversification and encourages on-farm and industry efficiency. Based on consultation from feedback we have prioritised actions to: continuously improve water modelling in the Border Rivers; update the Extreme Events Policy and develop a valley river operation plan; and finalise the vulnerability assessment for crops in the Border Rivers to understand how industries may need to adjust under a more variable climate.

Conversion of general security licences to high security

The consultation paper included an action to increase the availability of high security licences. However, during consultation there was very limited support for progressing this action. As a result, we have deprioritised this by removing it as an action in the strategy, but retained it as a longer term consideration under the action to modernise the water management framework so it can continue to support economic diversification.

Understanding groundwater

In association with Queensland we have built a numerical model for the Border

3 www.mdba.gov.au/water-management/river-operations/water-resource-modelling/reports

Rivers alluvial groundwater system. In the future we will look to undertake scientific studies on the impacts of climate change and connectivity between surface water and groundwater to inform sustainable extraction limits.

Implementation of groundwater actions within the Border Rivers region will be undertaken in line with the NSW Groundwater Strategy when it is finalised.

Compliance

During consultation we heard concerns about the perceived lack of compliance of water users within the law. The Natural Resources Access Regulator is responsible for the enforcement of water laws in NSW through monitoring, compliance and regulation.

The NSW Government is implementing robust metering laws to make sure that 95% of the potential water taken in NSW is accurately measured and monitored[4].

Under the NSW Non-Urban Water Metering Policy, the extraction of water will begin to be accurately measured and reported on all unregulated rivers in the Northern Basin from December 2021, which will start to build a better understanding of water usage over the next few years. Accurate and near real time measurement of floodplain harvesting will also be introduced and enforced as a result of licences in the Border Rivers coming into effect from September 2022.

Inter-jurisdictional water management and collaboration

The NSW Government recognises the uniqueness of the Border Rivers 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 what happens on the NSW side of the catchment will impact Queensland and vice versa.

During consultation we heard that many water users along the Queensland-NSW border hold water licences in both states and that differences in approaches were confusing. We heard there was a need to explore opportunities to improve cross-border collaboration and communication to support a consistent approach across the whole region for water management.

In response to consultation we have included a new action in the Border Rivers Regional Water Strategy to improve cross-border collaboration and information sharing.

Finalising and implementing the strategy

An Implementation Plan is attached to the Border Rivers Regional Water Strategy. It outlines the timing, responsibilities and funding sources to enable implementation of the actions within the strategy. The Implementation Plan does not provide a detailed scoping plan for each action. Rather, it prioritises and sequences the delivery of actions over the 20-year life of the strategy and beyond. The regional water strategies will be a key tool in seeking funding as future opportunities arise, and funding will be considered in when and how the actions will be implemented.

We are not able to implement all actions at once. The focus of the first stage of implementation will be on preparing for the next drought and setting up frameworks to support resilience within and across catchments. This will prioritise the health and resilience of towns, the environment and outcomes for Aboriginal people.

It is our intention that regional water strategies progress will be publicly reported on annually. This will ensure implementation is transparent and accountable. It will also allow the strategy to continue to adapt to address changing and emerging issues.

The Border Rivers Regional Water Strategy will be reviewed at least every 5 years. This is in recognition that government priorities may change. This could involve new developments in infrastructure and assessments to deliver key outcomes, advances in technology, improvements in modelling, access to new information and changes to legislation.

4 *The NSW and Australian Governments have committed $23.6 million and $12.5 million respectively to the metering program to ensure that meters are upgraded effectively. This includes rebates for water users who switch to telemetry-based systems*

Image courtesy of Bron Powell, Department of Primary Industries - Fisheries.
Macintyre River between Budelah Reserve and Mungindi.

Image courtesy of Floodplain Harvesting Team,
Department of Planning and Environment, Barwon River at Mungindi, NSW.

More information:

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

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