

Draft Far North Coast Regional Water Strategy



What we heard

Public consultation: November - December 2022

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Acknowledgement of Country

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 Far North Coast region as having an intrinsic connection with the lands and waters of the Far North Coast Regional Water Strategy area. The landscape and its waters provide First Nations people with essential links to their history and help them to maintain and practice their traditional culture and lifestyle.

We recognise that Traditional Owners were the first managers of Country and incorporating their culture and knowledge into the management of water in the region is a significant step toward 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 to 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

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Summary

Background

The NSW Government has developed regional water strategies as part of a broader suite of long-term strategies. These strategies aim to improve the security, reliability, quality and resilience of the state's water resources for current and future generations.

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

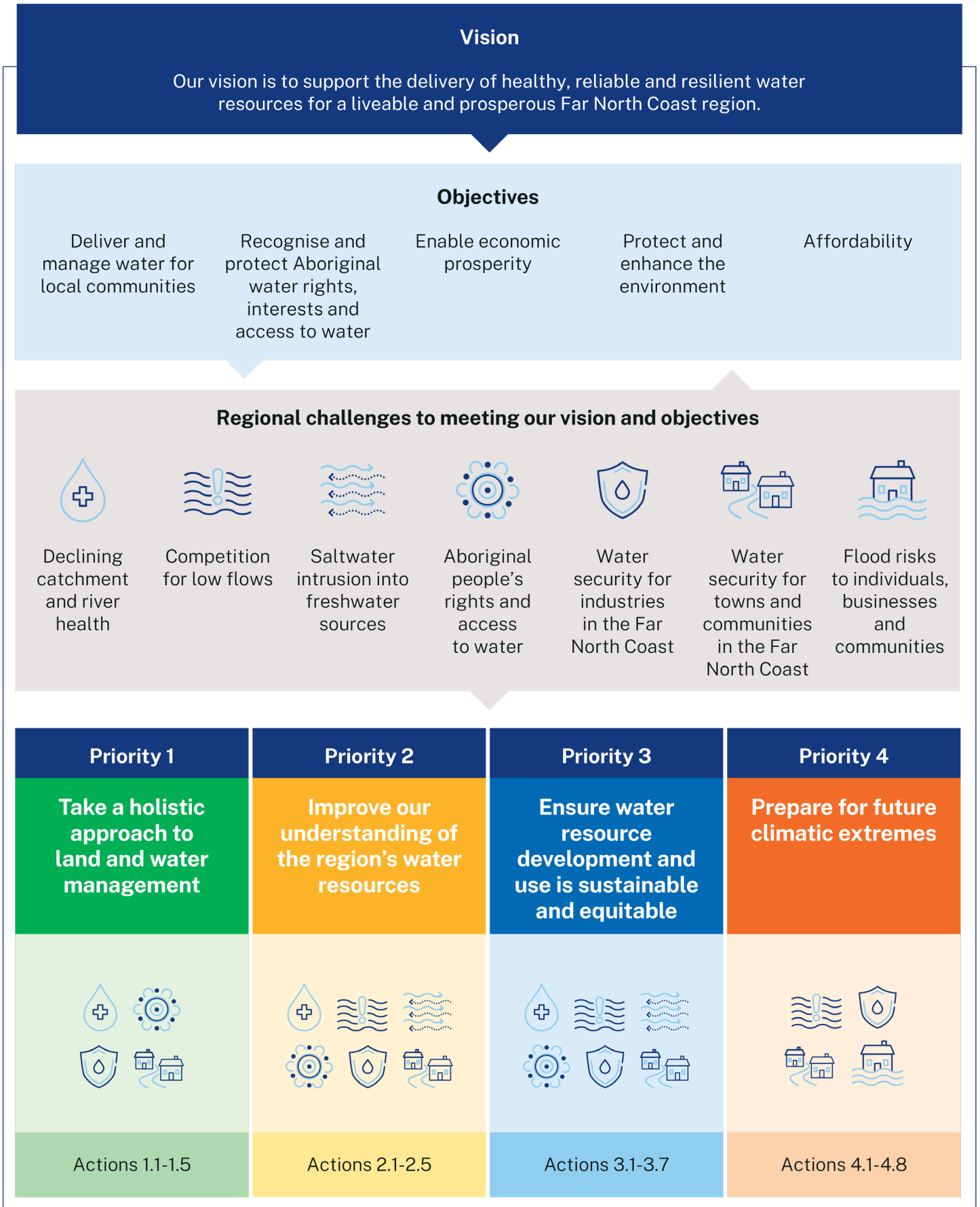
The Far North Coast Regional Water Strategy (the strategy) examines the water-related risks and challenges in the region. It also proposes the actions we need to take to manage water availability and security risks.

The NSW Department of Planning and Environment (the department) has taken a staged approach to develop the strategy. The early steps identified a long list of options. After consultation and additional analyses, the long list was narrowed down to a shortlist of priority areas and proposed shortlisted actions.

Figure 1 NSW water strategy regions



Figure 2 Draft Far North Coast Regional Water Strategy: overview of strategy vision, objectives, water security challenges and shortlisted priorities



Feedback

During public consultation in this phase (phase 2), the department received 176 formal submissions, 79 of which were campaign letters. Over 60 people participated in engagement sessions about the strategy, noting that these sessions were conducted together with consultation on other government water-related projects. Attendance numbers represent total attendance at the public information sessions (see Figures 4 and 5).

Feedback ranged from general commentary about water-related issues — such as water security and the need to explore water efficiency measures and alternative water supplies — to specific feedback about proposed shortlisted actions.

This report summarises what we heard during the public consultation phase 2 process. It includes input and analysis from fillable forms and submissions, as well as informal feedback and insights from the public and targeted information sessions.

This report presents feedback by:

- [Priority areas](#)
- [Priority actions](#).

Figure 4 Far North Coast public consultation phase 2 timeline of activities

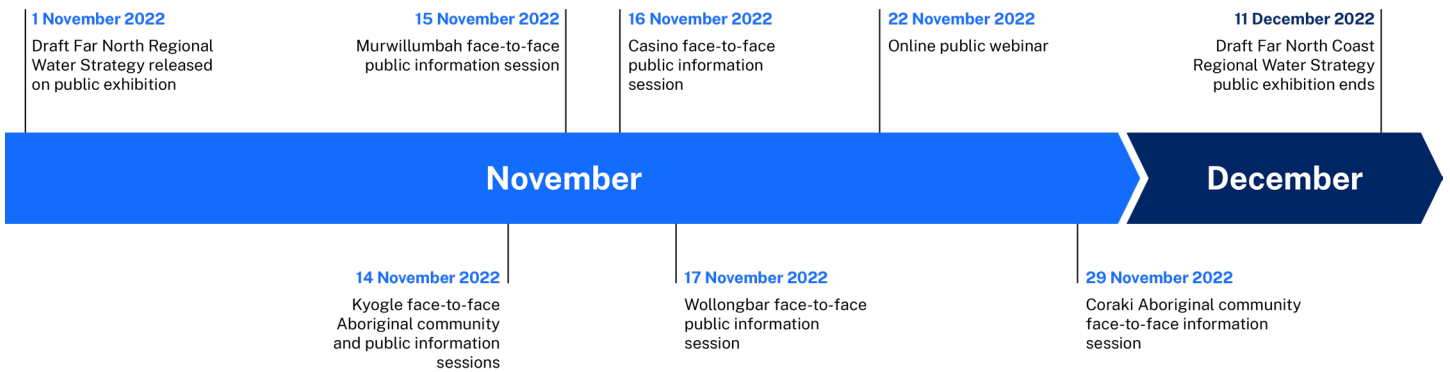
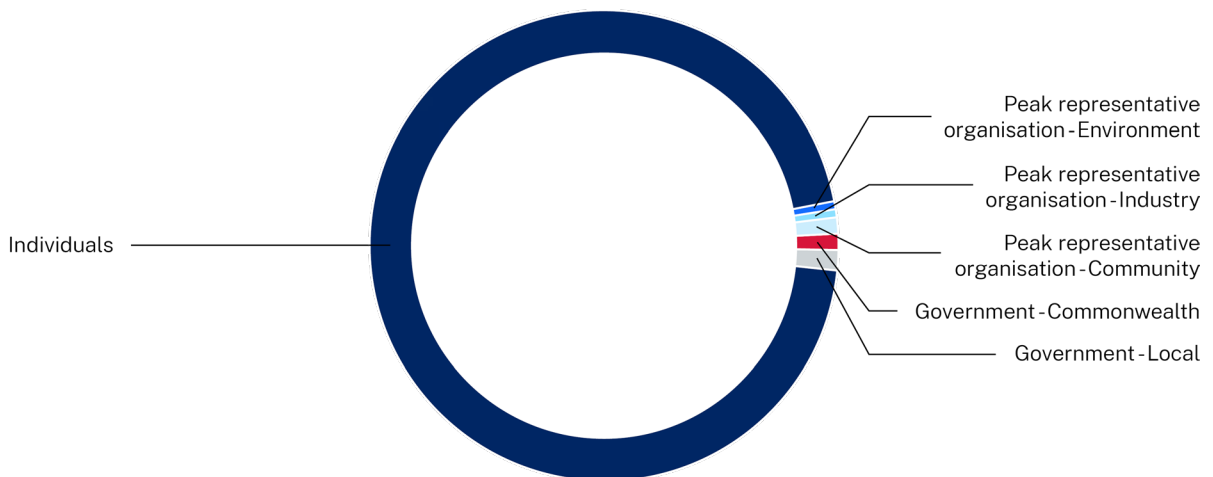


Image courtesy of Destination NSW

Figure 5 Far North Coast public consultation phase 2 engagement at a glance



Figure 6 Overview of submissions by stakeholder type



What we heard: a snapshot

Feedback indicated general support for a majority of the priority areas and actions identified in the strategy, with qualified support in other areas.

A snapshot of feedback by priority area is provided below.

Table 1 Snapshot of feedback by priority

Themes	Key feedback
 <p>Priority 1: Take a holistic approach to land and water management</p> <ul style="list-style-type: none"> • Improving Aboriginal people's participation and access • Supporting whole-of-catchment planning and management • Supporting improved flood management and modelling 	<p>Involving Aboriginal people in water planning and management was strongly supported. The importance of using actions rather than words to support Aboriginal involvement was widely noted. There was support for a whole-of-catchment approach to water management and support for river rehabilitation in the region. The significant impact of recent flooding events and responsibility for flood management were raised.</p>
 <p>Priority 2: Ensure water resource development and use is sustainable</p> <ul style="list-style-type: none"> • Supporting ecological and environmental resilience • Promoting Aboriginal outcomes • Supporting sustainable water extraction 	<p>Protecting fish and other aquatic animals was acknowledged as a high priority, with concerns about the impact of infrastructure on the ecology and environment and about the declining numbers of some aquatic species. There was support for pursuing Aboriginal business opportunities and for listening to Aboriginal voices to promote positive outcomes for Aboriginal people.</p>
 <p>Priority 3: Prepare for future climatic extremes</p> <ul style="list-style-type: none"> • Considering the role of local government in water planning • Investigating water efficiency measures and alternative water supply options • Supporting equitable and sustainable growth 	<p>There was mixed feedback about the role and responsibility of local government in providing water supply, with concerns about capacity, capability, trustworthiness and political motivation of councils. Investigating water efficiency measures and alternative supply options was strongly supported. Climate change impacts were a concern, highlighting the importance of adaptive and responsible planning and management approaches.</p>
 <p>Other feedback</p> <ul style="list-style-type: none"> • Engaging effectively and appropriately • Developing and implementing the strategy • Aligning the strategy with other government plans 	<p>Providing options and appropriate timeframes for Aboriginal engagement were considered important, as was ensuring engagement methods are inclusive and accessible. For effective implementation of the strategy, stakeholders emphasised the importance of establishing governance arrangements and securing significant and sustained financial investment.</p>

Feedback by priority area

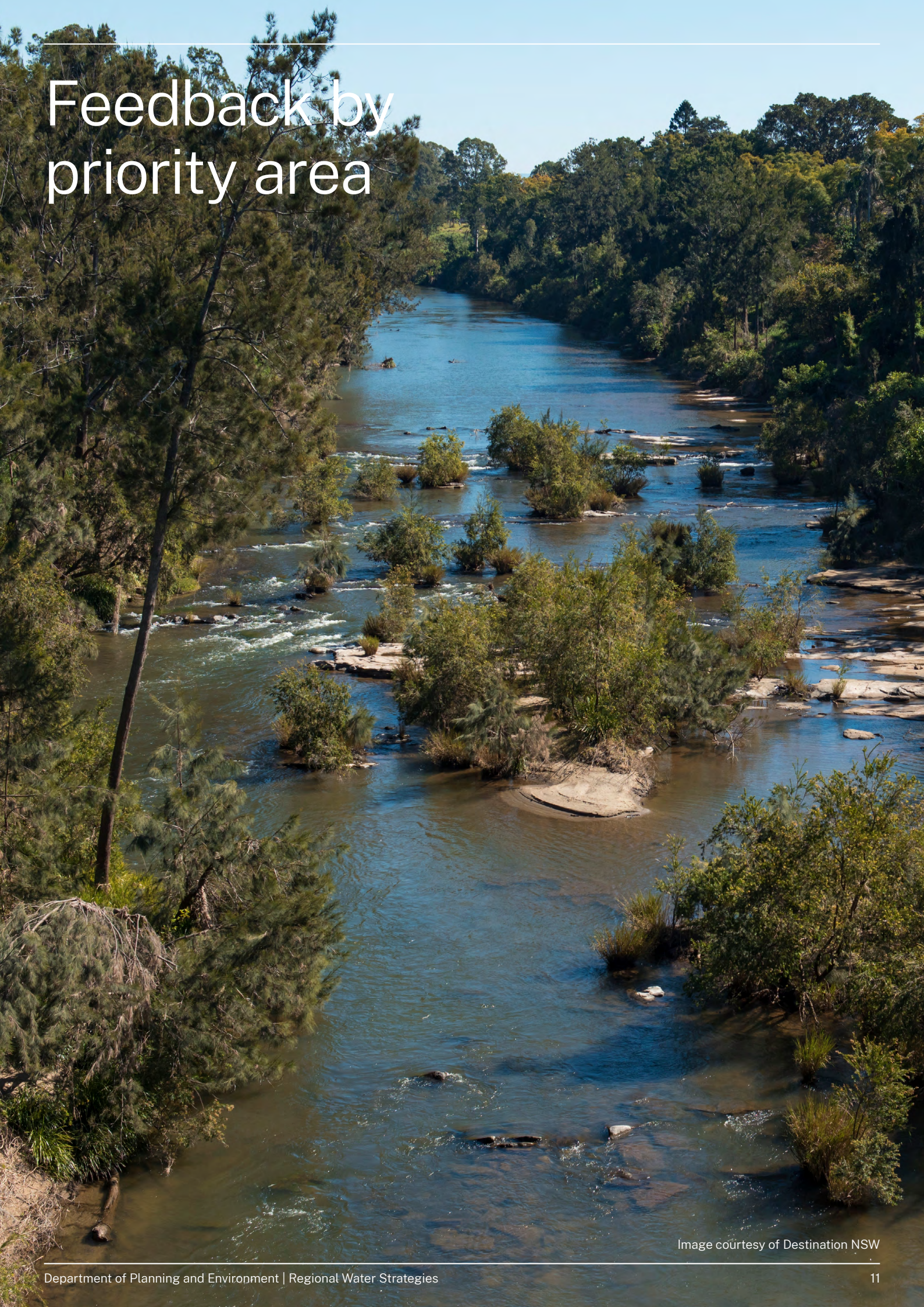


Image courtesy of Destination NSW

Feedback by priority area

This section summarises the feedback from public consultation phase 2 by the priority areas of the strategy.

While some respondents addressed specific elements of the strategy, others provided general commentary or suggestions for consideration.

Each area discusses issues as expressed by respondents and concludes with a brief response from the NSW Government.

The proposed Dunoon Dam is not explicitly included in the shortlist of actions in the strategy. However, there was significant feedback about it.

While there was some support for further investigations into the proposed Dunoon Dam, there was strong concern about environmental, cultural and economic impacts. Further feedback is provided in the 'Feedback on options not progressed' section of this report.



Image courtesy of Destination NSW



Priority 1: Take a holistic approach to land and water management

Feedback summary

Involving Aboriginal people in water planning and management was strongly supported. The importance of using actions rather than words to support Aboriginal involvement was widely noted.

There was support for a whole-of-catchment approach to water management and support for river rehabilitation in the region.

The significant impact of recent flooding events and responsibility for flood management were raised.

Consultation feedback

Improving Aboriginal people's participation and access

- There was strong support for improving participation of Aboriginal people in water planning and management, and involving Aboriginal people in identifying cultural sites.
- The importance of using actions rather than words to support Aboriginal involvement in water management and decision-making was widely noted.
- There was concern about the usability, cost, compliance and accessibility of Aboriginal cultural water access licences. It was suggested that education and support are provided to promote understanding of cultural water licences.
- Limited access to waterways and to Country was a concern.
- There was confusion about the various departments involved in water management and the appropriate representative to be engaged to resolve issues.

Supporting whole-of-catchment planning and management

- There was support for a whole-of-catchment approach for long-term, secure, sustainable water management and planning. Some respondents felt the strategy does not currently demonstrate a whole-of-catchment, whole-of-system approach.
- Managing land, culture, water and the environment holistically was considered important.
- It was suggested that an entity or river commissioner be appointed to lead a coordinated approach to river and water management at a catchment level. Involving representatives from key stakeholder groups in developing a governance framework was also suggested.
- River rehabilitation was considered critically important, noting that a sustained and coordinated response, alongside long-term funding, is required for rehabilitation to be effective.
- Water quality within the Richmond River system was a concern, particularly its impact on recreation, potable water supply and the aesthetic value of coastal and estuarine beaches.
- There was concern that cultural activities, such as swimming, fishing and hunting, could not occur due to low water levels, poor water quality and sedimentation.
- Replanting creek and river banks were suggested as a method of stabilising the banks, slowing down flood waters and limiting the amount of soil entering waterways.

Supporting improved flood management and modelling

- The significant impact of the recent flooding in the Far North Coast region was raised. While some acknowledged that flood management is outside the scope of the strategy, others felt frustrated that the strategy can only play a supportive role in flood management. Some also felt the strategy does not adequately acknowledge or recognise the 2022 flooding event.
- Integrating flood and hydrologic modelling and including up-to-date flood modelling based on recent weather events were considered important.
- It was suggested that the department undertake assessments of council flood mitigation infrastructure to understand its long-term viability, re-validate purpose and effectiveness and assess resilience to current and future climate risks and impacts.
- The impact of flooding and inadequate flood mitigation measures on Aboriginal communities was noted.



Image courtesy of Destination NSW

Response to feedback

Improving Aboriginal people's participation and access to water

The department is developing the NSW Aboriginal Water Strategy (see Action 2.2 of the NSW Water Strategy) and a culturally-appropriate engagement framework. The framework will describe when and how we engage with Aboriginal people and peak organisations in an inclusive way and with ongoing consultation. The NSW Aboriginal Water Strategy will support the NSW Government to fund existing and new Aboriginal organisations to improve their capacity for involvement in water-related matters.

Action 1.1 of the Far North Coast Regional Water Strategy will build local community capability to engage meaningfully and have input into water decision-making. The NSW Aboriginal Water Strategy will improve education about, and implementation of, cultural water licences. It will also consider issues around access to Country.

This capability building will lead to better outcomes for local Aboriginal communities. It is also consistent with the Closing the Gap strategy. It may include formal partnership arrangements to support Closing the Gap by enshrining agreed joint decision-making roles and responsibilities.

Supporting whole-of-catchment planning and management

The NSW Government considered the suggestion to appoint a river commissioner to lead a coordinated approach to river and water management in the region in 2019. Through the Richmond River Governance and Funding Framework, the department ran a collaborative process to develop a governance model for the catchment. The final design used a collaborative partnership model. This will support a coordinated approach to improving the overall health of the Richmond River (see Action 1.3).

The NSW Government is also seeking to focus more on improving water quality across the state. Through the NSW Water Strategy, the department is reviewing water quality governance in NSW to develop a water quality roadmap. The objectives of the water quality roadmap are to:

- better understand current surface and groundwater water quality management and monitoring arrangements at different levels of government
- consider options to improve the clarity of roles, accountabilities and frameworks for monitoring, assessing and addressing surface water and groundwater water quality risks.

Supporting improved flood management and modelling

A number of agencies are involved in the preparation for, and response to, flood events. Local councils are primarily responsible for managing flood risks in their local government areas. Local councils develop floodplain risk management plans and include measures in their planning instruments to ensure that development is appropriately sited and that controls such as minimum floor levels are complied with. The Department of Planning and Environment – Environment Heritage Group (DPE – EHG) provides technical advice and financial support to assist councils' flood risk management activities. DPE – EHG has been consulted closely throughout the development of the strategy to ensure there are appropriate linkages to their work where possible. The State Emergency Service is the lead combat agency in flooding emergency response situations. The Northern Rivers Reconstruction Corporation was established to prioritise, sequence and enable the significant reconstruction and place-based adaptation effort across the region.

In response to the widespread floods in 2021 and 2022, the NSW Government commissioned an independent expert inquiry into the preparation for, causes of, response to and recovery from the 2022 flood events in NSW. The NSW Government supported all 28 recommendations, either in full or in principle. Work on implementing these recommendations has already commenced. Recently, the NSW Government has:

- Established the NSW Reconstruction Authority
- Prioritised flood mitigation projects for funding
- Started background work to improve the stream gauging network and to develop a catchment-scale flood model for the Richmond River.

The department understands the community desire to integrate flood and water security modelling. The department supports improving integration of flood models with water security models. However, models for water security and for flood risk use very different approaches. Understanding water security requires long-term, continuous models, while understanding flood risk requires short-term, event-based models.

Flood models currently exist that can be adapted to support the assessment of flood impacts from actions in the regional water strategies. The department is also considering how to use information from its new hydrologic models to inform flood assessments. These developments can help us to test water management options using hydraulic flood models to better our understanding of their effects on flow regimes.



Priority 2: Ensure water resource development and use is sustainable and equitable

Feedback summary

Protecting fish and other aquatic animals was acknowledged as a high priority, with concerns about the impact of infrastructure on the ecology and environment and about the declining numbers of some aquatic species.

There was support for pursuing Aboriginal business opportunities and for listening to Aboriginal voices to promote positive outcomes for Aboriginal people.

Establishing sustainable extraction limits was supported, and it was suggested that groundwater extraction should be restricted to emergencies due to concerns about limited supply.

Consultation feedback

Supporting ecological and environmental resilience

- The impact of infrastructure on the ecology and environment was a concern, with an example given of how on-stream dams restrict platypus migration. It was also suggested that infrastructure, such as dams that block free passage and cause cold water pollution, should not be permitted.
- There was also concern about the impact of water infrastructure on the remnant Big Scrub rainforest.
- Protecting fish and other aquatic animal health was acknowledged as a high priority.
- There was some concern about declining numbers of Richmond River cod, prawns and turtles, and that runoff and decaying vegetation are polluting waterways, reducing oxygen and impacting aquatic animal health.
- Implementing measures to rehabilitate natural environments was considered important, particularly given weeds and feral animals are impacting rivers and wetlands. Rehabilitating natural environments can also contribute to flood mitigation and floodplain health.

Promoting Aboriginal outcomes

- There was support for pursuing opportunities to support Aboriginal businesses like aquaculture, horticulture, nurseries and rangers.
- There were suggestions to involve Aboriginal people in programs to support private landowners with fencing and riparian revegetation and facilitate opportunities for Aboriginal ranger groups to secure contracts from the department.
- Access to funding to develop economic opportunities was considered important, as was developing educational resources to help empower Aboriginal communities.
- Listening to Aboriginal voices was also considered important, particularly their concerns about the impact of the Dunoon Dam on Widjabul Wia-bal burial sites.
- There was concern that the strategy does not adequately focus on water security for Aboriginal communities or options to drive positive economic outcomes for Aboriginal people.

Supporting sustainable water extraction

- There was support for establishing and enforcing sustainable extraction limits. However, there was concern that the existing extraction limits were set without guiding principles or frameworks, and the current process for establishing extraction limits is unclear.
- Some stakeholders suggested groundwater use should be limited to emergencies due to concerns about limited supply.
- Raising public awareness of resource and ecological limits was considered important, as was outlining the assessment process to identify and mitigate potential impacts of extraction limits on water reliability.
- There was concern about the environmental impacts of water extraction.

Response to feedback

Supporting ecological and environmental resilience

Proposals for new infrastructure or modifications to existing infrastructure need to be assessed by several government agencies before approval. These agencies include DPI Fisheries, DPE Environment and Heritage Group, and DPE Planning. These assessments and approvals ensure that infrastructure changes are appropriate and, where required, include mitigation measures. Actions 3.1 to 3.3 of the strategy aim to further reduce the impact of water infrastructure on ecosystem health.

Actions 1.4 and 1.5 of the strategy aim to improve water quality. They will improve aquatic environments and support landholders to reduce the negative effects of their activities on water quality. We hope this will support an increase in the populations of species such as cod, prawns and turtles.

Promoting Aboriginal outcomes

Our consultation highlighted that there are concerns about the effects of water infrastructure on important Aboriginal cultural sites. Infrastructure proponents must consult with local Aboriginal communities. This process should identify which cultural impacts are acceptable to the community and which are not. A large portion of the Far North Coast is now covered by Native Title. The Native Title Act 1993 sets out procedures that governments have to follow before going ahead with future acts.

Some submissions on the strategy suggested the NSW Government implement specific programs for Aboriginal people (e.g. ranger groups and revegetation programs). The NSW government will support local communities to develop their own, place-based opportunities through actions 1.2 and 3.7 of the strategy. This will lead to better outcomes for local Aboriginal communities. It is also consistent with the Closing the Gap strategy. Issues such as developing economic opportunities that have broader, state-wide implications will be addressed by the NSW Aboriginal Water Strategy.

Supporting sustainable water extraction

The NSW Government recognises the community concerns about establishing extraction limits. Action 3.4 of the strategy is designed to address these concerns. Steps for the proposed future work in this area are outlined in the Far North Coast Regional Water Strategy Implementation Plan. Any changes to extraction limits proposed under Action 3.4 will be made with extensive public consultation.

Water extraction can have environmental impacts, but these impacts must be balanced with the needs of towns, communities and businesses. The [Water Management Act 2000](#) describes the priorities for water access. It establishes the environment as the top priority for access followed by basic landholder rights. Other extraction, such as that for economic benefit, must be considered in this context. The Act does not preclude use of water for economic purposes when the needs of the environment and social uses are not fully met.

The idea of limiting groundwater use to emergencies only would require complex policy that needs to consider issues of equity, existing licences, access priorities, land use and many other factors. Action 2.3 of the strategy will support the NSW Government to plan better for the effects of land use change and future extraction on groundwater resources. The NSW Groundwater Strategy will support integrating land use planning with groundwater resource assessments.



Priority 3: Prepare for future climatic extremes

Feedback summary

There was mixed feedback about the role and responsibility of local government in providing water supply, and concerns about capacity, capability, trustworthiness and political motivation of councils.

Investigating water efficiency measures and alternative supply options was strongly supported.

Climate change impacts were a concern, highlighting the importance of adaptive and responsible planning and management approaches.

Consultation feedback

Considering the role of local government in water planning

- There were mixed views about the role and responsibility of local government in providing a secure and affordable water supply. Council representatives emphasised their statutory obligations to provide adequate levels of service to their communities.
- There was some community support for councils' planning and actions. At times this was qualified with a requirement that the community and other key stakeholders are involved in decision-making about water supply and that increased compliance checks are conducted.
- From some stakeholders, there was strong concern about:
 - the capacity, capability, trustworthiness and political motivation of councils
 - perceived unwillingness of some councils to consider alternative water supply options, with continued focus on investigating Dunoon Dam.
- Promoting council transparency was considered important, as was providing information about the responsibilities of government. Some councils were concerned about the limited understanding within the community of the key functions of local water utilities and how these functions interact with the strategy.

Investigating water efficiency measures and alternative water supply options

- There was strong support for investigating water efficiency and alternative supply options, with suggestions that 50% of water supply options should not be dependent on rainfall.
- There was support for water recycling, and installation and use of rainwater tanks, with suggestions to provide subsidies to install rainwater tanks at new and existing properties. Investigating managed aquifer recharge and managing leaks in existing infrastructure were also supported.
- There was support for educating the community and industry about water efficiency strategies, especially water recycling, to increase understanding and encourage behavioural change.
- It was noted that there are existing examples of best practice water recycling options which should be used to demonstrate it can be an effective option.
- Reviewing regulations and guidelines that create barriers to pursuing recycled water options was considered important.
- There were mixed views about desalination, with some support for investigating it as a water supply solution, mainly if powered by renewable energy. However, concerns remain about construction and operational costs.
- Building water storages to capture additional surface water was supported by some.
- It was suggested that greater emphasis must be placed on water demand management.
- Improving water security for irrigated agriculture was considered important because of benefits to the broader economy and community.

Responding to climate impacts

- There was concern about the impacts of climate change on the region, with calls for the strategy to be informed by these impacts, such as rising sea levels and more extreme weather events.
- Adaptive and flexible planning approaches were considered important to ensure responsiveness to climate impacts.
- There was support for providing information and educational resources to improve community understanding of climate change and current water management systems and processes. It was suggested increasing water and climate literacy will assist with community adaptiveness and preparedness.

Supporting equitable and sustainable growth

- The importance of managing and limiting population growth was noted. This was due to concerns about finite water supply and the environmental impacts of a growing population.

Response to feedback

Considering the role of local government in water planning

The NSW Government acknowledges the need for robust and transparent processes when planning for future water needs. Major infrastructure projects need to go through an environmental impact statement process which includes statutory public exhibition periods. This ensures that projects meet the requirements for flow, fish passage, other environmental considerations and adequate community engagement.

The NSW Government also acknowledges the statutory requirements for councils to provide adequate levels of service for their communities. The NSW Government is supporting councils to improve their water security. For example, the new regulatory and assurance framework for local water utilities will ensure local councils manage risks effectively and strategically.

Investigating water efficiency measures and alternative water supply options

BASIX is the main mechanism to improve uptake of rainwater tanks in new housing builds. The NSW Government is considering the effectiveness of BASIX in driving water efficiency and sustainability through Action 6.6 of the NSW Water Strategy (A new state-wide Water Efficiency Framework and Program). Many local councils in the Far North Coast region already offer rebates for installation of rainwater tanks.

The Regional Demand Management Plan¹ covers 5 local government areas in the region. It describes the water supply demand management initiatives to be implemented by the 5 councils over the period 2019–2022. Rous County Council's integrated water cycle management strategy includes a schedule of works for reducing non-revenue water and improving efficiency. The barriers and opportunities for regional demand management planning will largely be addressed through:

- NSW Water Strategy Action 4.3 (Improve drought planning, preparation and resilience), and
- NSW Water Strategy Action 6.6 (A new state-wide Water Efficiency Framework and Program)

Supporting equitable and sustainable growth

Local planning decisions are the responsibility of local councils. Planning decisions generally consider the capacity of existing infrastructure to support population growth. Regional water strategies use the NSW common planning assumptions to estimate future regional populations. This ensures a consistent whole-of-government approach to planning and investment. Considering policy mechanisms such as limiting population growth is outside the scope of the regional water strategies.

¹ Hydrosphere Consulting 2018, *Regional Demand Management Plan: 2019–2022*, Rous County Council, <https://www.rous.nsw.gov.au/>

Other feedback

Feedback summary

Providing options and appropriate timeframes for Aboriginal engagement were considered important, as was ensuring engagement methods are inclusive and accessible.

For effective implementation of the strategy, stakeholders emphasised the importance of establishing governance arrangements and securing significant and sustained financial investment.

Consultation feedback

Engaging effectively and appropriately

- While some viewed the department's approach to prioritising consultation with Aboriginal people as commendable, others felt that the consultation approach did not allow adequate time for Aboriginal people to participate. Some Aboriginal stakeholders felt their views from previous consultation had been ignored.
- There was concern that additional community consultation was not undertaken between public consultation phase 1 and 2. It was suggested that further engagement is conducted with all stakeholders to inform the continued development of the strategy.
- Providing accessible engagement methods and a variety of opportunities to participate in meaningful discussions were identified as important, as was ensuring that feedback received through different channels is considered equally and supported by qualitative research.

Developing and implementing the strategy

- Establishing governance arrangements to monitor, evaluate and report against the strategy and actions was considered important.
- Stakeholders emphasised that there must be significant and sustained financial investment to implement the strategy effectively.
- Some people expressed concern that many water management concepts, terms and rules are confusing, highlighting the importance of using clear and comprehensible language in the strategy.
- There was some concern about the process of assessing the long list of options presented in the 2020 draft strategy. It was felt that the rapid and detailed cost-benefit assessment of options was incomplete and insufficient.
- It was suggested that the cost assessment process should also include information about cost-sharing arrangements.
- There was support for making data, information and modelling developed for the strategy publicly available, acknowledging that Water Modelling-Stochastic Climate Data has recently been shared on the SEED Open Data Portal.

Aligning the strategy with other government plans

- There was interest in understanding how the strategy aligns with other water strategies, such as the NSW Water Strategy, NSW Groundwater Strategy and the NSW Aboriginal Water Strategy. It was also identified that the strategy should outline how it interacts with the key functions of local water utilities.

Response to feedback

An implementation plan is attached to the strategy. It outlines the timing, responsibilities and funding sources to enable the implementation of 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 strategy will be a key tool in seeking funding as future opportunities arise. Funding will be key to when and how actions are implemented.

The implementation plan identifies how actions in state-wide strategies will align with the actions identified at a catchment level.

The strategy does not explicitly include any infrastructure options. It does reference the Integrated Water Cycle Management (IWCM) processes where councils have identified required infrastructure investment. The implementation plan may reference specific infrastructure options that council has identified to meet current and future demands. References to infrastructure in an implementation plan does not mean a project is funded. The implementation plan assists better understanding the sequencing of initiatives and may help gain funding in the future. As with all major infrastructure investment, this would require separate economic and environmental assessment.

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

The strategy will be reviewed at least every 5 years. This recognises that government priorities may change. This could involve new developments in:

- infrastructure and assessments
- technology
- modelling
- information
- legislation.

Feedback by actions



Image courtesy of John Spencer,
Department of Planning, Industry and Environment

Feedback by actions

The strategy identified 7 water-related challenges specific to the Far North Coast region.

To address these challenges, it proposed a number of shortlisted actions.

This section summarises the feedback received during public consultation phase 2 about these actions. It has been collated from submissions, survey-style fillable forms and engagement sessions.

This feedback will be a valuable input in the development of the final strategy actions.

Indications of support for priority areas and actions reflect the sentiment of those who explicitly referenced this in their feedback. It does not indicate general support from all who made a submission, completed a fillable form or provided feedback at engagement sessions.

The majority of these comments are addressed in the “Response to Feedback” sections above.

Far North Coast regional priority areas at time of public exhibition:

1. Take a holistic approach to land and water management
2. Ensure water resource development and use is sustainable and equitable
3. Prepare for future climatic extremes.



Image courtesy of Destination NSW



Priority 1: Take a holistic approach to land and water management

Actions shortlisted under this priority will:

- incorporate Aboriginal knowledge and culture into land and water management
- undertake whole-of-catchment planning, decision-making and project delivery
- support local landholders to adopt best practice land use and water management
- improve our understanding and management of the region's water resources.

Table 2 Priority 1 feedback by action

Actions	Summary of feedback
1.1 Foster ongoing arrangements for participation of local Aboriginal people in water management	<p>Strong support for the ongoing participation of local Aboriginal people in water management.</p> <p>Ensuring those engaging with Aboriginal people have experience and cultural training are involved was considered important, as was providing appropriate timeframes for cultural discussions to take place.</p> <p>Understanding Aboriginal people's concerns about the impacts of water infrastructure on cultural heritage was considered important.</p> <ul style="list-style-type: none">• <i>This action was nominated as a priority for implementation.</i>
1.2 Support place-based initiatives to deliver cultural outcomes for Aboriginal people	<p>Strong support for initiatives that contribute to cultural outcomes and a sense of place for Aboriginal people.</p> <p>Understanding Aboriginal people's concern about the impact of water infrastructure was considered important to be able to deliver meaningful cultural outcomes.</p> <ul style="list-style-type: none">• <i>This action was nominated as a priority for implementation.</i>
1.3 Support whole-of-catchment governance	<p>Strong support for a whole-of-catchment governance approach, noting this action is essential for long-term secure water resource management and supply.</p> <p>Further detail was requested about the entity that will lead a whole-of-catchment governance and the geographic extent of their authority.</p> <p>A co-design process was suggested to develop the approach, including key stakeholders, local Aboriginal people and community representatives.</p> <ul style="list-style-type: none">• <i>This action was nominated as a priority for implementation.</i>
1.4 Deliver a river rehabilitation program	<p>Strong support for a program to improve river and ecosystem health. Substantial and long-term funding for river rehabilitation was regarded as essential.</p> <p>Rehabilitation of the Richmond River was considered a priority, and there was interest in whether the program can be extended beyond the Richmond River catchment.</p> <p>The construction of water infrastructure was seen as conflicting with the objective of rehabilitating rivers.</p> <ul style="list-style-type: none">• <i>This action was nominated as a priority for implementation.</i>

Actions	Summary of feedback
1.5 Support landholder adoption of best practice land management	<p>Strong support for improving the health of waterways through supporting landholder adoption of best practice land management. Stakeholders noted the importance of encouraging, assisting and funding landowners to fence off riparian zones and undertake replanting.</p> <p>It was suggested that:</p> <ul style="list-style-type: none"> • laws are developed and strictly enforced • educational resources are provided to landowners • grants and incentives are available to encourage sustainable best practice • a co-designed, strength-based approach is used with landholders to develop ‘fit for purpose’ tools for land management. <ul style="list-style-type: none"> • <i>This action was nominated as a priority for implementation.</i>
1.6 Assess the vulnerability of surface water supplies to sea level risk and saltwater intrusion	<p>Strong support for improving understanding of the risks of rising sea levels and saltwater intrusion on local water supply.</p>
1.7 Identify environmental water needs to support healthy coastal waterways	<p>Strong support for identifying environmental water needs for priority surface and groundwater aquatic ecosystems.</p> <p>Concern that dams will disrupt rather than improve ecosystem health and reduce current environmental flows.</p> <ul style="list-style-type: none"> • <i>This action was nominated as a priority for implementation.</i>
1.8 Characterise and plan for climate change and land use impacts on coastal groundwater sources	<p>Strong support for understanding how climate change impacts groundwater sources and for ensuring information to inform management and protection of groundwater is publicly available.</p> <p>Support for peer-reviewed climate modelling to underpin long-term decision-making on whole-of-catchment and groundwater management.</p> <p>It was suggested that consideration is given to the fact that climate change projections are uncertain, and it is difficult to quantify the impacts of climate change.</p>
1.9 Protect ecosystems that depend on coastal groundwater	<p>Strong support for improving understanding and protection of groundwater-dependent ecosystems.</p> <p>Minimising the use of groundwater was considered essential to protecting ecosystems.</p>
1.10 Improve monitoring of water extraction	<p>Strong support for improving water extraction monitoring.</p> <p>It was suggested that water metering is made mandatory for all surface and groundwater extraction and real-time smart monitoring is implemented.</p>
1.11 Support councils to improve catchment-scale flood modelling in the Richmond River catchment	<p>Strong support for improving catchment-scale flood modelling in the Richmond River catchment.</p> <p>It was suggested that more stakeholders are invited to contribute to improving flood modelling, including councils, Bureau of Meteorology, State Emergency Services, the department and local community. Promoting the role of community in flood monitoring and resilience was considered important.</p> <p>It was suggested that modelling can be improved by being informed by recent flooding events, research from the CSIRO and Northern Rivers Resilience Initiative.</p>
1.12 Plan for land use pressures on coastal groundwater resources	<p>Planning for land use pressures on coastal groundwater resources was strongly supported. It was considered important that there is more information about how land use impacts groundwater.</p> <p>The preference was raised to use alternative water sources instead of groundwater wherever possible.</p>



Priority 2: Ensure water resource development and use is sustainable and equitable

Actions shortlisted under this priority aimed to:

- reduce the impact of water infrastructure on native fish populations
- better manage competing demands for water.

Table 3 Priority 2 feedback by action

Actions	Summary of feedback
2.1 Improve fish passage	Strong support for improving fish passage. <ul style="list-style-type: none"> • <i>This action was nominated as a priority for implementation.</i>
2.2 Implement fish-friendly water extraction	Strong support for implementing fish-friendly water extraction, with some stakeholders suggesting screens on irrigation pumps should be mandatory.
2.3 Address cold water pollution	Strong support for addressing cold water pollution, noting that water infrastructure can create cold water pollution.
2.4 Establish sustainable extraction limits for surface water and groundwater sources	Strong support for using an evidence-based approach to establish sustainable extraction limits for surface water and groundwater sources. <p>It was suggested that consultation is conducted with water users and Aboriginal communities to inform the development of extraction limits.</p> <ul style="list-style-type: none"> • <i>This action was nominated as a priority for implementation.</i>
2.5 Reduce the take of low flows	Strong support for reducing the take of low flows. <p>It was suggested that pumping for small landholders is restricted during drought conditions and that evaporation from water storage is managed.</p> <p>There were mixed views about water storage, with some support for on-farm and off-stream storage but concern about the potential for storages to increase the take of low flows.</p>
2.6 Address catchment-based impacts of increased harvestable rights limits	Strong support for addressing catchment-based impacts of increased harvestable rights limits. However, there was concern about the increase in harvestable rights to 30% and the impact of this increase on environmental flows. <p>It was suggested that scientific evidence is used to review harvestable rights frequently (maximum every 3 years).</p>
2.7 Support Aboriginal business opportunities	Strong support for supporting Aboriginal people to develop business opportunities. <p>It was suggested that business opportunities are created for Aboriginal businesses in consultation with Aboriginal stakeholders, are environmentally friendly and accessible to small businesses run by Aboriginal and/or Torres Strait Islander people.</p>



Priority 3: Prepare for future climatic extremes

Actions shortlisted under this priority aimed to:

- Support local councils and water users to manage risks
- Optimise use of existing water supplies
- Investigate alternative water supplies.

Table 4 Priority 3 feedback by action

Actions	Summary of feedback
<p>3.1 Support local councils to provide a secure and affordable water supply for towns</p>	<p>Mixed views were heard about supporting local councils to provide a secure and affordable water supply for towns.</p> <p>There was some support for this action, provided local water utilities are aligned with the direction of the draft strategy. However, there was concern that there is inadequate focus on investigating water efficiency measures and alternative supply options. Comments indicated a lack of trust in councils to make decisions based on science and evidence and with consideration of Aboriginal culture.</p> <p>Local water utilities noted the importance of the community being aware of the integrated water cycle management planning process, which is essential for the future of the region.</p> <ul style="list-style-type: none"> • <i>This action was nominated as a priority for implementation.</i>
<p>3.2 Provide better information about water availability and climate risks</p>	<p>Strong support for the department providing more information about water availability and climate risks. There was also support for making climate models and datasets developed for the draft strategy publicly available.</p> <p>It was suggested that the uncertainty and unpredictability of climate change are considered.</p>
<p>3.3 Support regional-scale, adaptive decision-making for town water supplies in the Far North Coast</p>	<p>Mixed views about supporting regional-scale adaptive decision-making for town water supplies.</p> <p>Regional-scale, adaptive decision-making was supported in principle, provided the support is robust, directive where necessary and monitored. However, there was concern about councils being responsible for decision-making on future water management options due to a lack of trust in councils to make informed decisions based on evidence and science.</p> <p>Community members and Aboriginal people were considered key stakeholders in developing adaptive approaches. State government oversight was also considered important.</p> <ul style="list-style-type: none"> • <i>This action was nominated as a priority for implementation.</i>
<p>3.4 Enhance coastal water markets</p>	<p>While there was general support for enhancing coastal water markets, there was concern about commercialising water. It was also noted that water markets are incompatible with Aboriginal knowledge and values.</p>
<p>3.5 Investigate increased on-farm water storage</p>	<p>Widespread support for investigating on-farm water storage, noting the importance of understanding ecological and community impacts. However, there was concern that patterns of stream flows have already been impacted by infrastructure and therefore on-farm water storage should only be considered after sufficient investigation of alternative water sources.</p>
<p>3.6 Investigate managed aquifer recharge in the Far North Coast region</p>	<p>Strong support for investigating managed aquifer recharge.</p> <p>It was suggested that investigation occurs alongside development of necessary frameworks and guidelines, including a review of the relevant regulatory framework.</p>

Actions

Summary of feedback

3.7 Protect coastal groundwater resources for town water supplies and rural water users

Strong support for protecting groundwater resources, particularly coastal groundwater.

Investigating alternative water supplies, water efficiency measures and demand management options before using coastal groundwater was suggested.

3.8 Investigate a recycled water plan for the Far North Coast

Strong support for a recycled water plan for the Far North Coast.

It was suggested that the action goes beyond investigating and includes steps to implement a recycled water plan. It was recommended that the department produces educational resources to inform the community about recycled water and increase acceptance.

- *This action was nominated as a priority for implementation.*



Image courtesy of Destination NSW

Suggested additional actions

Some respondents suggested additional actions that they felt could be considered as part of the feedback process:

Action	Feedback	Response to feedback
State-wide water efficiency measures	Suggestion to include an action focused on a system-wide water efficiency framework to improve compliance and remove confusion.	The NSW Water Strategy sets the overarching vision for regional and metropolitan water strategies, tailored to the individual needs of each region in NSW. The NSW Government's Water Efficiency Program is supporting community adoption of water system efficiency, water conservation and demand management measures.
Regenerative landscape management	Suggestion to include an action to pursue regenerative landscape management to rehydrate landscapes and reduce water loss during drought by restoring riverbanks and wetland systems.	This suggestion shares many common outcomes with proposed action 1.4 "Deliver a river rehabilitation program". This proposed action seeks to deliver a whole-of-catchment program that prioritises and guides works to improve the health of the region's rivers and the ecosystems they support. Regenerative landscape management may be considered further throughout the implementation phase of action 1.4 in consultation with NSW Government partner agencies.

Feedback on options not progressed

Some respondents provided feedback on options that were not progressed from the original long list:

Option	Feedback
Option 1: Connect independent water supplies in the region to the Rous County Council network	There was support for funding a feasibility study into connecting smaller systems to the Rous County Council bulk water supply. It was suggested that this option requires further concept development before an assessment process is used to determine the potential benefits.
Option 11: Regional desalination	There was support for funding the development of a feasibility assessment for a large-scale regional desalination facility. Concept development is required to be complete, followed by a cost-benefit assessment.
Option 12: Raise Clarrie Hall Dam level	There was support for raising Clarrie Hall Dam to minimise the need to frequently initiate work on emergency supplies. However, there was also concern that the dam is rainfall-dependent and water supply will still be vulnerable during prolonged dry periods.
Option 13: New dam on Byrill Creek	Support for not progressing with this option.

Option	Feedback
Option 14: Construct a new Dunoon Dam on Rocky Creek	<p>While there was some support for continuing to investigate Dunoon Dam to increase supply and to assist with flood mitigation, there was strong concern about Dunoon Dam, particularly due to the:</p> <ul style="list-style-type: none"> • negative impact on the environment and endangered ecological communities, including remnant areas of the Big Scrub rainforest. • negative impact on fish passage. • potential for the dam to increase the take of low flows and to create cold water pollution. • negative impact on cultural sites and heritage, specifically the Widjabul Wia-bal sacred burial sites, and impact on Aboriginal communities. Understanding Aboriginal people’s concerns about the dam was considered important. • financial cost of the dam and its effectiveness in providing water security for a growing population and mitigating flood risk. • assessments and studies indicating that the dam should not progress. • lack of trust in council to make decisions based on evidence, science, community sentiment and with respect for Aboriginal culture. • councils focus on Dunoon Dam instead of water efficiency measures and alternative water supply options.
Option 19: Raise Toonumbar Dam level	<p>There was support for raising Toonumbar Dam level to increase town water supply.</p>
Combined option 1: Expand Rous County Council’s bulk water system through Dunoon Dam	<p>The same concerns were raised about Combined option 1 as raised about Dunoon Dam. It was suggested water efficiency measures are explored instead.</p>
Combined option 2: Maximise the use of the proposed Clarrie Hall Dam augmentation	<p>It was noted that if this option is to progress, Tweed Shire Council should not be impacted financially or in terms of security of supply.</p> <p>It was suggested that connecting bulk water supplies of Rous County Council and Tweed Shire Council should be investigated further before progressing to determine mutual benefit for both parties.</p>

Response to options not shortlisted

The strategy does not explicitly include any infrastructure options. It does reference the Integrated Water Cycle Management (IWCM) processes where councils have identified required infrastructure investment. The implementation plan may reference specific infrastructure options that council has identified to meet current and future demands.

References to infrastructure in the implementation plan are not guarantees that projects will proceed. Progressing an infrastructure option requires a full business case, funding, and appropriate approvals. The implementation plan helps to better understand sequencing and can support funding applications. As with all major infrastructure investment, this would require detailed economic and environmental assessment.

Providing safe, secure, efficient, sustainable and affordable water supply and sewerage services is primarily the responsibility of local councils. The strategy will support local councils to explore local and regional solutions for water security and reliability. This support will be provided by implementing:

- Action 4.1 Support local councils to provide a secure and affordable water supply for towns
- Action 4.3 Support regional-scale, adaptive decision-making for town water supplies in the Far North Coast



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More information:

water.dpie.nsw.gov.au/plans-and-programs/regional-water-strategies



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