

# Submission Questionnaire

Draft South Coast Regional Water Strategy - Submission Form



## Regional Water Strategies Public Exhibition Submission Questionnaire

*The NSW Government is taking action to improve the security, reliability, quality and resilience of the state's water resources. The South Coast Regional Water Strategy will deliver healthy and resilient water resources for a liveable and prosperous regional NSW.*

This draft strategy is being developed by the Department of Planning, Industry and Environment and provides an opportunity to re-shape what we are doing in regional water management and chart a path forward.

We have been working with local water utilities, councils and other stakeholders to inform the draft South Coast Regional Water Strategy. Our proposed consultation program with Aboriginal communities was disrupted by bushfires and the COVID pandemic. We are planning to engage with Aboriginal communities in the South Coast region during November 2020 to ensure the inclusion of local and traditional knowledge and that the strategy reflects the values and interests of local communities.

### Your Voice is important

We have prepared this draft strategy to continue our discussions with you. We would like to hear your views on the draft strategy as a whole including the process we used to develop the strategy and the evidence that supports it. We are also seeking your feedback on the options presented in the draft strategy and whether you have any further information that could help us to assess the benefits and disadvantages of any of the options.

Please provide your feedback in the submission form below and email your completed submission to [regionalwater.strategies@dpie.nsw.gov.au](mailto:regionalwater.strategies@dpie.nsw.gov.au) or post to Regional Water Strategies, Department of Planning, Industry and Environment, Locked Bag 5022, Parramatta NSW 2124 by **13 December, 2020**.

The questionnaire includes general questions about the regional water strategy including objectives, vision, modelling, opportunities and challenges. It also includes questions regarding the draft options along with personal information questions.

The questionnaire will take approximately 15 minutes to complete and your response can remain anonymous if you wish (see question 3).

Questions marked with an asterisk (\*) require an answer.

If you have any questions about the questionnaire, please email:  
[regionalwater.strategies@dpie.nsw.gov.au](mailto:regionalwater.strategies@dpie.nsw.gov.au)

## Making your submission public

We collect information about you, which may include personal information, to assess submissions in response to the department's dealings and activities, and perform other functions required to complete the project. This information must be supplied. If you choose not to provide the requested information we may not be able to assess your submission.

To promote transparency and open government, we intend to make all submissions publicly available on our website, or in reports. Your name or your organisation's name may appear in these reports with your feedback attributed.

**If you would like your submission and/or feedback to be kept confidential, please let us know when making your submission.** You will be asked for your confidentiality preference at question 1.

If you request your submission be kept confidential, it will not be published on our website or included in any relevant reports, however it will still be subject to the *Government Information Public Access Act 2009*.

Your submission will be stored securely consistent with the department's Records Management Policy and you have the right to request access to, and correction of, your personal information held by the department.

Further details can be found in our privacy statement available on our website.  
<https://www.industry.nsw.gov.au/privacy>

*Information from this form is collected for the purpose of receiving your feedback on the draft regional water strategy. The supply of this information is voluntary. Your details will be stored in NSW Department of Planning, Industry and Environment records. Information will be stored and managed in accordance with provisions under the Privacy and Personal Information Protection Act 1998. It will not be used for any other purpose and will not be given to any other third party except where required by law. To access or correct your personal information, contact us using the information at [dpie.nsw.gov.au/contact](https://www.dpie.nsw.gov.au/contact)*

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### 1. Information on confidentiality and privacy \*

I give my permission for my submission to be publicly available on the NSW Department of Planning, Industry and Environment website.

Yes                  No

I would like my personal details to be kept confidential.

Yes                  No

## 2. Your details

Email address \*

Name \*

Address \*

Contact phone number \*

Do you identify as an Aboriginal person?

Yes

No

Are you an individual or representing an organisation?

Individual

Organisation

## 3. Organisation or business details

Who do you represent?

**Government:**

Commonwealth

New South Wales

State other

Local

**Local Water Utility**

**Peak representative organisation:**

Environment

Industry

Business group or business chamber

Community organisation

**Other**

## 4. Draft regional water strategy objectives and vision

The draft South Coast Regional Water Strategy is one of 13 strategies (12 regional water strategies and a Greater Sydney Water Strategy) being developed by the department. All regional water strategies are being developed in line with the following objectives:

- **Deliver and manage water for local communities**  
-Improve water security, water quality and flood management for regional towns and communities.
- **Enable economic prosperity**  
- Improve water access reliability for regional industries.
- **Recognise and protect Aboriginal water rights, interests and access to water**  
- Including Aboriginal heritage assets.
- **Protect and enhance the environment**  
- Improve the health and integrity of environmental systems and assets, including by improving water quality.
- **Affordability**  
- Identify least cost policy and infrastructure options.

All draft regional water strategy options need to address at least one of the above objectives.

Our vision for this strategy is to have healthy and resilient water resources (that withstand extreme events and adapt to these changes) for a liveable and prosperous South Coast region.

To achieve this, we need to position the region so there is the right amount of water of the right quality, delivered in the right way to meet the future needs of Aboriginal people, towns, communities, industries and the environment.

### **Do you support this vision for the South Coast Regional Water Strategy?**

Yes

No

**If no, please outline your vision for the long term management of water resources in this region?**

## **5. Information and modelling used to develop the South Coast Regional Water Strategy**

The draft South Coast Regional Water Strategy packages the most up to date information and evidence with all the tools we have – policy, planning, behavioural, regulatory, technology and infrastructure solutions.

- **New climate data:**
  - Observed historical climate data - recorded rainfall, temperature and evaporation data.
  - Stochastic climate data - the statistical characteristics of the historical data was used to generate more than 13,000 years of synthetic climate data.
  - Climate change scenarios.
- **Review of existing studies**
  - to identify drivers and risks for water resource management.
- **Community engagement:**
  - Local councils and joint council organisations.
  - Aboriginal peak bodies.
  - Review of previous water management consultations.

### **A) Do you have any comments about the information used to develop this strategy?**

### **B) Please provide details if there is additional information you think we should also consider?**

## 6. Stochastic modelling method

We used a stochastic modelling method (based on the statistical characteristics of the new climate data) in order to get a dataset covering up to 13,000 years. This enables us to quantify the natural variability and extremes in the region with greater certainty. We also considered two climate change scenarios to 'pressure test' the effectiveness of the region's water systems in a worst-case scenario.

**A) Do you have any comments about the modelling method used to develop this strategy?**

**B) Is there any additional information that you believe could help us assess the benefits and disadvantages of draft options?**

## 7. Opportunities and challenges for water management in the South Coast region

During the South Coast Regional Water Strategy drafting stage, the following opportunities, risks and challenges were identified.

- **Changing climate conditions will increase the pressure on water resources**
  - Uncertainty around future changes in rainfall, evaporation and sea level rise and the impact on future flows and supply.
  - Future climate could be more variable with shifts in rainfall patterns, higher rates of evaporation and more hot days.
  - Inflows to Brogo Dam could decrease however the dam will continue to be a reliable supply of water most of the time.
  - Water extraction is likely to increase as demand for water by towns and irrigators grows.
  - Sea levels are project to rise in the region by 0.09 and 0.19 metres by 2030 and between 0.24 and 0.59 metres by 2070.
  - Increases in the frequency and severity of drought and floods will exacerbate challenges caused by erosion and poor water quality.
- **Towns, communities and industries in the region are vulnerable to increased water security risks**
  - Protecting water for towns, agriculture, food manufacturing and stock and domestic needs will become difficult with greater climate variability.
  - The region is not set up to manage extreme dry periods that we now know are part of natural climate variability.
  - Volume of entitlement held in the Brogo Dam is more than the dam's capacity
  - Currently Brogo Dam is operating at a loss and represents a financial liability to the state.

- **Protecting water-dependent environmental assets is challenging**
  - Water for the environment is not actively managed and largely dependent on stream flows.
  - Reductions in river flows in the Bega and Tuross catchments and reductions in high flow events in the Brogo River and streams flowing into estuaries.
- **Better management of groundwater**
  - Groundwater is found in alluvial, coastal sand and hard rock aquifers.
  - Alluvial aquifers are expected to come under threat from sea level rise-induced saline intrusion.
  - Hard rock aquifers represent a largely untapped resource and may offer options for addressing regional water challenges.
- **Opportunities to improve how we manage and use water in the region**
  - New climate information offers opportunities to review and update water sharing and access rules.
  - Make better use of existing water supply infrastructure and develop regional scale solutions, improve water quality and support the regions industries.
  - Involve Aboriginal communities more directly in water decision-making and incorporate traditional knowledge into water management.

**A) Do you have any comments on the opportunities, risks and challenges identified?**

**B) Are there any additional opportunities, risks and challenges that we should consider and what options could address these?**

## **8. Draft South Coast Regional Water Strategy options**

We have developed a long list of options that could be included in the final South Coast Regional Water Strategy. The options consider the opportunities and challenges facing the region and meet at least one regional water strategy objective.

The 44 options are grouped in different categories, being:

- Maintaining and diversifying water supplies
- Protecting and enhancing natural ecosystems
- Supporting water use and delivery efficiency and water conservation
- Strengthening community preparedness for climate extremes.

In addition, the final long list of options will also include a focus on:

- Improving recognition of Aboriginal people’s water rights, interests and access to water.

Only feasible options will be progressed to the final strategy stage – following a rigorous assessment process. We are seeking your feedback to inform the options assessment process. Further details on each option is outlined in the strategy documents and a summary included below.

## Maintaining and diversifying water supplies

- |                                                                                                          |                                                                                    |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1. Pipeline from Brogo Dam to Bega-Tathra town supply system                                             | 10. Desalination for supply augmentation                                           |
| 2. A reserve volume from the Brogo-Bermagui town water supply system                                     | 11. Instream dam at Reedy Creek                                                    |
| 3. Water Treatment Plant for Brogo-Bermagui town water supply system                                     | 12. Eurobodalla Southern Storage                                                   |
| 4. Water Treatment Plant for Yellow Pinch Dam                                                            | 13. Increased harvestable rights for coastal draining catchments                   |
| 5. Upgrade water main between Bewong and Milton                                                          | 14. Improve releases from Cochrane Dam to better match water demands of irrigators |
| 6. Pipeline connecting Bega Valley Shire Council and Eurobodalla Shire Council town water supply systems | 15. Increased industry access to high flows                                        |
| 7. Vulnerability of surface water supplies to sea level rise                                             | 16. Increased on-farm water storage                                                |
| 8. Reuse of reclaimed water                                                                              | 17. A grid of off-stream storages in the Bega Valley                               |
| 9. Managed aquifer recharge investigations and policy                                                    | 18. Tuross River barrage                                                           |
|                                                                                                          | 19. Increased capacity of Brogo Dam                                                |
|                                                                                                          | 20. Increase capacity of Cochrane Dam                                              |
|                                                                                                          | 21. Brown Mountain Water Project (pumped-hydro scheme)                             |
|                                                                                                          | 22. Instream dam at Crystalbrook                                                   |

## Protecting and enhancing natural ecosystems

- |                                                                                                   |                                                                          |
|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 23. Establish sustainable extraction limits for South Coast surface water and groundwater sources | 28. Fish friendly water extraction                                       |
| 24. Shift extractions from low streamflows to high streamflows                                    | 29. Improved fish passage in South Coast rivers                          |
| 25. Extend water and sewer services to southern villages (Shoalhaven Water)                       | 30. Improve stormwater management                                        |
| 26. Southern Reclaimed Water Management Scheme                                                    | 31. Bringing back riverine and estuarine habitats and threatened species |
| 27. Merimbula Effluent Management Scheme                                                          | 32. Characterising coastal groundwater resources                         |
|                                                                                                   | 33. Protecting ecosystems that depend on coastal groundwater resources   |

## Supporting water use and delivery efficiency and water conservation

- |                                                       |                                                                                 |
|-------------------------------------------------------|---------------------------------------------------------------------------------|
| 34. Active and effective water markets                | 37. Shorten the Bega-Brogo regulated river system                               |
| 35. Improved data collection and information sharing  | 38. Increased general security allocations in Bega-Brogo regulated river system |
| 36. Weir at Brogo-Bermagui town water supply off-take | 39. Regional network efficiency audit                                           |



## Strengthening community preparedness for climate extremes

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40. River Recovery Program for the South Coast: a region-wide program of in-stream works, riparian vegetation and sediment control

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41. Apply the NSW Extreme Events Policy to the South Coast region

42. Quantify the resource potential of South Coast hard rock aquifers

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43. Planning for climate change impacts on coastal groundwater resources

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44. Planning for land use pressures on coastal groundwater sources

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### A) Which five (5) options do you think are most important?

Please list the option numbers in order of importance with the first option being most important

Option Number

Option Number

Option Number

Option Number

Option Number

### B) Please comment on why you think these options are most important?

### C) Which five (5) options do you think are least important (if any)?

Please list the option numbers in order of least importance with the first option being least important

Option Number

Option Number

Option Number

Option Number

Option Number

### D) Please comment on why you think these options are least important?

### E) Do you have any comments on the draft options?



## 9. Option combinations

The option list provided in the draft strategy also identifies potential combinations of options. These combinations recognise that most options require associated works, further assessments and/or legislative, policy and planning changes to ensure they address the risks and challenges identified in the South Coast region and do not have unintended impacts.

**A) Do you have any thoughts on how the options could be combined with other options?**

**B) Are there additional options that we should consider?**

## 10. Other comments

**Do you have any other comments about the South Coast Regional Water Strategy?**

## **11. How did you hear about the public exhibition of this strategy?**

We are interested to know how you heard about the opportunity to make a submission. Please indicate the communication methods below:

Newspaper

Radio

Department of Planning, Industry and Environment website

Direct email

Social media

Have your say NSW Government website

Communication from peak body

Other

## **12. Additional Information and submission process**

If you would like to provide any supporting documents to help us understand your view, please either, email these from the same email you provided in this form, or attach supporting documents to this form if you are returning your submission by mail.

All submissions on the draft South Coast Regional Water Strategy will be reviewed following the public exhibition period. Further targeted engagement will be undertaken along with the final phase of stakeholder engagement later in the year to review the final documents.



**Please email your completed submission and supporting documents to [regionalwater.strategies@dpie.nsw.gov.au](mailto:regionalwater.strategies@dpie.nsw.gov.au)**



**or post to Regional Water Strategies, Department of Planning, Industry and Environment, Locked Bag 5022, Parramatta NSW 2124 by 13 December, 2020.**



Further details on all regional water strategies can be found on our website <https://www.dpie.nsw.gov.au/regional-water-strategies>

**Thank you for your submission.**

## Extracted answers from fillable form above:

### Question 4.

I do support the concept and many of the strategies however, I think more focus should be place on incentives to reduce water use in all sectors. This should include subsidies for rainwater tanks and low water use appliances, grey water reuse systems in residential and commercial, new developments being required to install purple pipe for irrigation, and the development of large water holding reservoirs for storage for fire fighting.

### Question 7A.

I think rural property owners should have access to technical support and also receive financial incentives to slow down water runoff to help recharge the water table. This can be achieved with very little cost and can be assisted by strategies that also combine fertility management using composts. I think purple pipe reclaimed water should not be considered for drinking except as a last resort - in a largely rural area such as the south coast, ag and urban irrigation use should be the first option. It will be very expensive to try and treat the reclaimed water to drinking quality and will then will still likely be rejected by those with fears for the quality. Many chemicals are not even tested in water quality tests so these fears are likely well founded.

### Question 8B.

It is important to not waste our water resources - it sends a poor message to the population that extends beyond water to solid waste, energy etc. Reclamation and reuse measures will reinforce this important message. Also sending our treated waste water out to sea will result in potentially pharmaceuticals and other chemicals polluting our pristine marine environment. Also ground water recharge is an important way to rehydrate our rural landscapes.