

Submission Questionnaire

Draft Lachlan 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 Lachlan 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, communities, Aboriginal people and other stakeholders to ensure local and traditional knowledge informs the draft Lachlan Regional Water Strategy and that it serves the regional community, including Aboriginal people, the environment and industry.

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 or post to Regional Water Strategies, Department of Planning, Industry and Environment, Locked Bag 5022, Parramatta NSW 2124 by **13 November, 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 1).

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

If you have any questions about the questionnaire, please email:
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

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 Lachlan 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 Lachlan 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 Lachlan 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 Lachlan Regional Water Strategy

The draft Lachlan 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.

We have used the following information to develop the draft Lachlan Regional Water Strategy.

- **New climate data:**
 - Observed historical climate data - recorded rainfall, temperature and evaporation data.
 - Paleoclimate data - scientific reconstructed data using sources such as tree rings.
 - Climate drivers – key drivers of wet and dry periods.
- **Review of existing studies**
 - to identify drivers and risks for water resource management.
- **Community engagement:**
 - Local councils and joint council organisations.
 - Aboriginal peak bodies and Aboriginal community groups.
 - Review of previous water management consultations.

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

A review of existing studies that focuses only on drivers and risks for water resource management are focused on the drivers and risks of extractive use - economic drivers, in other words, the highest bidder.

The interaction of water, culture, environment, and community, also key drivers of economic wellbeing, are unlikely to be considered.

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

Broader longitudinal sociological and environmental studies, for the entire catchment and for discrete communities don't exist - those that do are often many decades old.

With dramatic changes to the way people view value as a consequence of extreme fires & COVID-19 there are new opportunities arising - what drives the highest dollar or where people live may change dramatically.

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 10,000 years. This enables us to quantify the natural variability and extremes in the region with greater certainty.

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 Lachlan region

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

- **Climate conditions place considerable stress on towns, communities, industries and ecosystems:**
 - Region has a naturally variable climate and modelling suggests periods between droughts could shorten.
 - Low inflows to Wyangala Dam.
 - Cowra and Forbes at a low risk of experiencing supply shortfalls.
 - Water security for towns and villages with single supply sources will be more challenging.
 - General security users could experience a decrease in average water availability.
 - Delivering water along the entire length of the Lachlan River will remain a challenge.
- **Review how we manage, use and deliver water to meet future challenges:**
 - Use new climate modelling to review water allocations and river operations.
 - Expansion in horticulture and mining developments is changing water use and demand patterns.
 - Growth is expected in the region's major centres.
 - Water reliability is critical to attract business and jobs.
- **Water is essential for Aboriginal people's health, wellbeing and connection to Country:**
 - Health of waterways impacts the wellbeing of the Traditional Owners and Custodians.
 - Provisions for accessing water for cultural purposes.
 - Improve Aboriginal people's involvement in water management.

- **Protecting critical environmental assets:**
 - Healthy water sources support the region’s environment.
 - The Lachlan catchment has significant wetlands and environmental assets.
 - The fish community is in poor health and some species are under threat.
 - Coordinated action and planning across the region should support environmental outcomes.
- **Better management of groundwater:**
 - Groundwater sources are critical for towns industries and ecosystems.
 - Groundwater levels in areas of concentrated use are in decline.
 - Sustainable access to groundwater resources by all water users.
 - More knowledge is needed about groundwater recharge rates.

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

the impact on communities by changing the current status is not considered

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

the potential benefit of allowing more water to move to the mid and lower lachlan

8. Draft Lachlan Regional Water Strategy options

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

The 48 options are grouped in different categories, being:

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

Draft options for the Lachlan Regional Water Strategy are outlined below.

Maintaining and diversifying water supplies

1. Water transfer pipeline between Lake Rowlands and Carcoar Dam	6. Inter-regional connections project investigation
2. Wyangala Dam raising project	7. Water quality treatment works
3. Lake Rowlands augmentation	8. Managed aquifer recharge investigations and policy
4. Expansion to the piped town water supply system	9. Reuse, recycle and stormwater projects
5. Replacement and upgrade of existing pipelines	10. Reliable access to groundwater by towns

Protecting and enhancing natural ecosystems

11. Cold water pollution mitigation measures	19. River Ranger Program
12. Environmental restoration works	20. Secure flows for water-dependent cultural sites
13. Improved management of wetlands on private land	21. Improved understanding of groundwater processes
14. NSW Fish Passage Strategy	22. Sustainable access to groundwater
15. Active management of flows	23. Improved clarity in managing groundwater resources sustainably
16. Water quality restoration works	
17. Floodplain management works	
18. Diversion screens to prevent fish extraction at pump offtakes	

Supporting water use and delivery efficiency

24. Water efficiency projects (towns and industries)	28. Review of water trade in the Lachlan region
25. Lower Lachlan efficiency measures	29. Water pricing pilot study
26. Mid-Lachlan efficiency measures	30. Urban water restriction policy
27. Improvements to the storage effectiveness of Lake Cargelligo	31. The 'Sheet of Water' storage

Strengthening community preparedness for climate extremes

32. Efficiency for drought security program	37. Training and information sharing programs: - new climate data / modelling - managing groundwater resources sustainably
33. Drought operation rules	
34. Review of water accounting and allocation process	38. Investigation to maintain amenity for regional towns during drought
35. Investigation of licence conversions	39. In-stream storage for the lower Lachlan
36. Improved data collection and storage	40. Land use change impact on water resources

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

41. Culturally appropriate water knowledge program	45. Water portfolio project for Aboriginal communities
42. Water-dependent cultural practices and site identification project	46. Co-management investigation of Travelling Stock Reserves
43. Shared benefit project (environment and cultural outcomes)	47. Regional Aboriginal Water Advisory Committee
44. Aboriginal cultural water access licence review	48. Regional Cultural Water Officer employment program

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?

improvements in water quality, including recycling, will contribute to water savings across the catchment.

improving knowledge and awareness, sharing that knowledge, will contribute to improved water management.

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?

the majority of structural proposals will not deliver more water across the catchment.

in particular the proposed changes to the Lake Cargelligo system will be detrimental to community, environment, and the local economy.

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

water does not become more efficient, only the use of water - projects that keep water in existing natural system by reducing losses and waste for water being moved out of those system should be prioritised.

Lake Cargelligo and its connected lakes and wetlands is one of those systems, clearly evidenced by any arial photo where soils types and topogrphay can be seen.

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 Lachlan region and do not have unintended impacts.

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

Lake Cargelligo present an opportunity to test and measure the impact of environmental improvement works, along with programs like River Rangers and Aboriginal knowledge development and sharing.

B) Are there additional options that we should consider?

Using Lake Cargelligo as a test site for native fish breeding with a view to commercialising sustainable native fishing - a potential added economic benefit for the water held in the Lake for both commercial and environmental purposes.

10. Other comments

Do you have any other comments about the Lachlan Regional Water Strategy?

see attachment

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

community networks

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 Lachlan 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



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

LAKE CARGELLIGO

An ecological, cultural, social, environmental, and economic asset

Lake Cargelligo has not been included in the wetlands of national significance, with many studies excluding this system, undermining its importance. Recent work is demonstrating its important to the health of the river ecology.

Much of the work undertaken along the river to assess habitat specifically excluded Lake Cargelligo, while including other off river and its contribution as a breeding ground and refuge is significantly understated.

The map, water resources in region, p50, does not show lake Cargelligo as a wetland area, choosing to exclude this important habitat & drought refuge, while including the truly ephemeral Cowl and Brewster lakes

Lake Cargelligo is referred to as an "off river storage", yet explorer diaries, Aboriginal sites like middens and ochre pits, and post white settlement history, all demonstrate that this Lake existed, on a more permanent basis than many other sites, including Brewster which as farmed continually post settlement until the significant investment in making it a storage.

The level of Lake Cargelligo was heightened by the more than 100-year-old earthworks, reducing the overall size of the Lake system, but it remains a natural wetland and lake system significant not just for recreation, but for native birds, fish, and water plants as both breeding ground and drought refuge.

Lake Cargelligo fills naturally from the river. Without the embankment located in a naturally creek water would begin moving into this system with just a high river. In a flood year water must go into the Lake.

Catchment flows

The longitudinal profile of the Lachlan, Figure 15, clearly demonstrates that without dams and weir, water would make its way to the end of the river. While regulators can move water away from its natural course and environment, they cannot regulate away the basic laws of gravity. Water must move to the lowest point, being the end of the river and the various natural lake and wetlands along its course. Regulation will not make water run up hill.

Any changes to the volume of water moving throughout the system by way of storing more at the top, or extracting it along the system, will directly and negatively impact the mid – lower Lachlan, the end of the river with the most significant ecological assets.

This includes piping water out of the catchment, reducing what would be naturally occurring flows via dams, weirs, and channels, managed aquifer recharge – these structural changes keep water where it would not normally have stayed so that it can be taken it out and send it where it does not normally go.

Lake Cargelligo made its water efficiency contributions to the Lachlan over 100 years ago, when a significant part of the connected wetland areas were cut off by earth works. Cutting Lake Cargelligo

into three smaller portions will in no way benefit the community or this important ecological site. The only apparent beneficiaries will be those who buy & sell water

The strategy refers to 'surplus' flows – there are no surplus flows in a river system. There are only flows that are surplus to the ability to be able to use the water outside of the river system.

Water that enters a river system is rarely anything other than a natural flow. How much tampering with that natural system is contributing to current climatic conditions, water quality issues, salinity, and loss of ecological values is yet to be determined.

The opportunities

Lake Cargelligo, and its connected wetlands, represent an opportunity to maximise the benefits of environmental works & management.

Even small change to the flow of water in Lake Cargelligo, along with carp harvesting have, observationally, generated benefits in improved water quality and fish breeding.

Lake Cargelligo is a community that would benefit greatly from the opportunities inherent in a River Ranger program.

Not just for the local Aboriginal population, but also as it represents an opportunity for sharing traditional knowledge with both the local community, already strongly connected to the Lake, and visitors, many of whom come to see the Lake, for recreation, and increasingly for bird watching.

Lake Cargelligo could also be a potential pilot for other commercial opportunities. Carp fishing commercially is already underway. Carefully managed stocking and take of native fish may represent another commercial opportunity, along with contributing to the depleted native fish stock, as noted in the draft