

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 Namoi 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 Namoi Regional Water Strategy and that it serves the regional community, including First Nations, 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@dpi.nsw.gov.au or post to Regional Water Strategies, Department of Planning, Industry and Environment, Locked Bag 5022, Parramatta NSW 2124 **by 16 May, 2021**.

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 questions 1 and 2).

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

If you have any questions about the questionnaire, please email:
regionalwater.strategies@dpi.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.

Submission Questionnaire

Draft Namoi Regional Water Strategy – Submission Form



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 that your submission is to 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>

1. Information on confidentiality and privacy*

I give permission for my submission to be made 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 making this submission as an individual or as a representative of an organisation?*

Individual Organisation

3. Organisation or business details

Who do you represent?

- Government (please specify)
 - Commonwealth
 - New South Wales
 - State other
 - Local
- Local Water Utility
- Peak representative organisation (please specify)
 - Environment
 - Industry
 - Business group or business chamber
 - Community organisation
- Other (please specify)

4. Draft regional water strategy objectives and vision

The draft Namoi 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 Namoi 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 the proposed vision for the Namoi Regional Water Strategy?

- Yes No

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

The main objective of the Namoi Regional Water Strategy should be to use available water in a sustainable manner by managing water demand.

5. Information and modelling used to develop the Namoi Regional Water Strategy

The draft Namoi 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 Namoi 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?

The NSW Government is saying that the Climate Change predictions for the Namoi Region are a worst case scenario, but those predictions are more likely to be what is experienced.

They indicate a shift in seasonal rainfall patterns with lower rainfall overall - less in winter and spring, more in summer and autumn. Evaporation, average temperatures and the number of hot days and fire weather will increase. The number of times Keenit

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 (this is a method that uses the characteristics of the climate data to generate long term, extended datasets) 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?

The NSW Government is saying that the Climate Change predictions for the Namoi Region are a worst case scenario, but those predictions are more likely to be what is experienced.

They indicate a shift in seasonal rainfall patterns with lower rainfall overall - less in winter and spring, more in summer and autumn. Evaporation, average temperatures

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

The draft Strategy identifies that river health is poor and that native fish population health is very poor. Water for river health is the highest priority of the NSW Water Management Act.

7. Opportunities and challenges for water management in the Namoi region

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

- **Climate** conditions combined with the way we currently manage and share water are placing the region's water resources under pressure
 - Namoi region has a variable climate that fluctuates between wet and dry
 - Recent drought was the worst on record and dams in the region reached historic lows
- Pressure on **town water** supplies across the region
 - Future climate could be more variable and towns could face extreme water security risks
 - Recent drought exposed the vulnerability of water supplies for many towns
 - Delivering water to towns at the end of the river system is especially difficult under drought conditions
 - Efforts made by community and government to conserve water supplies for human needs means that towns are better prepared for future droughts
 - Some towns are planning for population growth and this will place additional pressure on water resources
 - The proposed upgrade of Dungowan Dam aims to improve long-term water security for Tamworth

- **Water security and reliability** is essential for industry and economic development
 - Namoi region is home to productive agricultural, meat processing and mining operations
 - Industry demand and new development may change water demand or place pressure on water resources
 - Need for more innovative demand and efficiency measures to support industry growth
 - Diversification of industries may provide opportunities to reduce water requirements
- Opportunities for improved **connectivity to the Barwon-Darling system**
 - Namoi region contributes, on average, 24% of inflows into the Barwon-Darling River
 - Delivering environmental flows to the end of the system will support communities and aquatic ecosystems
- Water is essential for **Aboriginal people's health, wellbeing and connection to Country**
 - The health of the waterways impacts wellbeing
 - Current cultural water entitlements do not meet the needs of Aboriginal people
 - Opportunities to include Aboriginal people's involvement in water management
- Challenges in meeting **environmental needs**
 - Ecosystem health is poor, and the regions fish community is in very poor health
 - Climate conditions and low inflows pose a threat to riverine, aquatic and floodplain ecosystems
 - Low flows and less frequent small flooding events impact on groundwater recharge, water quality and riverine fauna and ecosystems
 - Additional water infrastructure along with operational changes that further regulate natural flows impact on native species and ecosystems
- Better management of groundwater
 - The Namoi region is one of the most groundwater-reliant in the state and is the only source of water for some towns
 - Groundwater supports significant agricultural productivity
 - Aquifer levels are declining in the Upper and Lower Namoi alluvial groundwater sources

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

Strongly object to Dungowan Dam & Pipeline being a commitment of the strategy. Including an unviable project (Productivity Commission, February 2021. Draft Report Review of National Water Reform) that does not meet the affordability criteria causes a bias in investment decisions. This project should be subject to prioritisation like all options in this strategy.

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

The draft Strategy does not acknowledge that water in the Namoi Region is over-allocated and cannot stretch to existing commitments, let alone any projected growth in demand.

8. Draft Namoi Regional Water Strategy options

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

The 56 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.

Maintaining and diversifying water supplies	
1. Government commitment for new Dungowan Dam	8. Managed aquifer recharge investigations and policy
2. Inter-regional pipelines, including inland diversion of water from the Macleay or Barnard rivers to the Namoi region	9. Reliable access to groundwater by towns
3. Inter-regional pipelines	10. Investigate opportunities for dual water systems
4. Suspension of water sharing plan provisions for planned environmental water for critical needs in the Peel River	11. Investigate the development of a water access licence for critical human needs
5. Investigate the use of advances water treatment technologies for towns	12. Investigate groundwater desalination for industry
6. Reuse, recycling and stormwater projects	13. Joint exploration for minerals and groundwater with the NSW Geological Survey
7. Connect the Peel Regulated River System to the Quipolly Dam	14. Water security for small communities
Protecting and enhancing natural ecosystems	
15. NSW Fish Passage Strategy	23. Revise water sharing plan provisions for planned environmental water

Submission Questionnaire

Draft Namoi Regional Water Strategy – Submission Form



Protecting and enhancing natural ecosystems	
16. Providing incentives to landholder to conserve and rehabilitate riparian, wetland and floodplain vegetation	24. Improve understanding of water use in unregulated water sources
17. Cold water pollution mitigation measures	25. Ability to redirect supplementary flows that are in excess of needs
18. Riparian habitat restoration and re-establishing threatened species	26. Improved understanding of groundwater processes
19. Diversion screens to prevent fish extinction at the pump offtakes	27. Implementation of groundwater quality monitoring program
20. Modification and/or removal of floodwork structures causing adverse impacts	28. Reducing risk of sediment compaction due to over-extraction of groundwater
21. Implementation of surface water quality mitigation measures	29. Protecting ecosystems that depend on groundwater resources
22. Improve connectivity with downstream systems	30. Improving information about impacts from State Significant Development and State Significant Infrastructure projects on water

Supporting water use efficiency and conservation	
31. Water efficiency projects (towns and industries)	34. Review urban water restriction policy
32. Improve water supply reliability	35. Implementing the Great Artesian Basin Strategic Management Plan
33. Review of water markets in the Namoi region	

Strengthening community preparedness for climate extremes	
36. New drought operational rules (Namoi and Peel rivers)	41. Maintain amenity for regional towns during drought
37. Review of water accounting and allocation processes	42. Improving understanding of low water availability on water dependent industries
38. Investigation of licence conversions	43. Sustainable access to groundwater by all users
39. Improved data collection	44. Improve transparency in managing groundwater resources sustainably
40. Training and information sharing programs	45. Land use change and population growth impacts on water resources

Improving recognition of Aboriginal people's water rights, interests and access to water	
46. Integrating Aboriginal knowledge into groundwater decision making	52. Establish a regional Aboriginal Water Advisory Committee
47. Culturally appropriate water knowledge program	53. Water allocations for Aboriginal communities
48. Water dependent cultural practices and site identification project	54. Co-management investigation of Travelling Stock Reserves

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

49. Secure flows for water dependent cultural sites	55. Aboriginal cultural water access licence review
50. Shared benefit project (environmental and cultural outcomes)	56. River Ranger Program
51. 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 one (1) being the most important

1. Option number 22
2. Option number 20
3. Option number 23
4. Option number 24
5. Option number 25

B. Please comment on why you think these options are most important.

I strongly support that the final Namoi Regional Water Strategy achieve improved outcomes for river health, native fish, waterbirds and wetlands:

- Option 22: Improved connectivity with Barwon-Darling
- Options 15, 17, 18 & 19: Implement the Native Fish Passage Strategy, address cold water pollution, encourage riparian restoration, screen pumps
- Option 20: Remove floodplain structures that cause adverse impacts
- Option 23, 24, 25: Improved management of water for environmental outcomes

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

Please list the option numbers in order of least importance with one (1) being the least important

1. Option number 2
2. Option number 4
3. Option number 7
4. Option number 12
5. Option number 13

D. Please comment on why you think these options are least important.

I object to the following options that are counter to environmental outcomes:

- Option 2: Inter- regional pipelines including from Macleay or Barnard Rivers
- Option 4: Suspension of environmental water provisions in Peel River
- Option 7: Connect Peel River to Quipolly Dam
- Option 12: Desalination of groundwater for industry
- Option 13: Joint exploration for minerals and groundwater

E. Do you have any other comments on the draft options?

I strongly support all options that improve First Nations access to water supply and cultural water; improve capacity, engagement and employment in water management; and that recognise the significance of cultural knowledge and improve cultural outcomes:

- All options from 46 to 56.

9. Do you have any thoughts on how the options could be combined with other options (please identify option numbers)?

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 Namoi region and do not have unintended impacts.

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

Remove floodplain structures that cause adverse impacts

B. Are there any additional options that we should consider?

Missing option: Adopt more efficient irrigation technology

Missing Option: improved connectivity & management of billabongs and lagoons

10. Other comments

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

This draft Strategy does not acknowledge that water in the Namoi Region is over-allocated and cannot stretch to existing commitments, let alone any projected growth in demand.

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 website
- Communication from peak body
- Word of mouth
- Other (please describe)

12. Additional information

If you would like to provide any supporting documents to help us understand your feedback, please 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 Namoi 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 any 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 16 May, 2021.



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.

© State of New South Wales through Department of Planning, Industry and Environment 2021. The information contained in this publication is based on knowledge and understanding at the time of writing (February 2021). However, because of advances in knowledge, users should ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate departmental officer or the user's independent adviser.

Extracted answers from fillable form above:

Question 5A.

The NSW Government is saying that the Climate Change predictions for the Namoi Region are a worst case scenario, but those predictions are more likely to be what is experienced.

They indicate a shift in seasonal rainfall patterns with lower rainfall overall - less in winter and spring, more in summer and autumn. Evaporation, average temperatures and the number of hot days and fire weather will increase. The number of times Keepit & Split Rock Dams fall below 5% capacity more than doubles while Chaffey Dam will be below 20% for long periods. Also prolonged 10-year dry periods and more short sharp droughts like 2019.

Question 6A.

The NSW Government is saying that the Climate Change predictions for the Namoi Region are a worst case scenario, but those predictions are more likely to be what is experienced.

They indicate a shift in seasonal rainfall patterns with lower rainfall overall - less in winter and spring, more in summer and autumn. Evaporation, average temperatures and the number of hot days and fire weather will increase. The number of times Keepit & Split Rock Dams fall below 5% capacity more than doubles while Chaffey Dam will be below 20% for long periods. Also prolonged 10-year dry periods and more short sharp droughts like 2019.

Question 8B.

I strongly support that the final Namoi Regional Water Strategy achieve improved outcomes for river health, native fish, waterbirds and wetlands:

- Option 22: Improved connectivity with Barwon-Darling
- Options 15, 17, 18 & 19: Implement the Native Fish Passage Strategy, address cold water pollution, encourage riparian restoration, screen pumps
- Option 20: Remove floodplain structures that cause adverse impacts
- Options 23,24,25: Improved management of water for environmental outcomes
- Options 26 – 29 & 43, 44: Research into groundwater health and sustainable access
- Option 21: Restore water quality
- Option 16: incentives to landholders to protect & restore water dependent ecology
- Option 30: More transparency on impacts of major development on water sources
- Missing Option: improved connectivity & management of billabongs and lagoons

Question 8E.

I strongly support all options that improve First Nations access to water supply and cultural water; improve capacity, engagement and employment in water management; and that recognise the significance of cultural knowledge and improve cultural outcomes:

- All options from 46 to 56.

I strongly support all options that reduce water consumption in towns and industry. More efficient use of water is critical to achieve sustainable communities into a future with less water:

- Option 5: Advance water treatment technologies for towns
- Option 6: Reuse, recycle and storm water projects
- Option 10: Dual water systems for towns
- Option 14: Water security for small communities
- Option 31: Water efficiency projects (towns and industries)
- Option 35: Implement Great Artesian Basin Strategic Management Plan
- Option 36: New drought operational rules (Namoi and Peel rivers)
- Missing option: Adopt more efficient irrigation technology