

Frequently asked questions – Draft NSW Groundwater Strategy

This document answers frequently asked questions about the Draft NSW Groundwater Strategy

QUESTION: Why is groundwater important to NSW?

Changing climatic conditions, population growth, increasing land development, changing community expectations and values as well as the need for more informed decisions have led the NSW Government to develop this draft strategy to ensure groundwater resources are managed sustainably in the future.

Groundwater is a vital resource for NSW communities, which must be sustained for current and future uses. More than 450 groundwater sources with over 3,000 gigalitres of water (equivalent to 1.2 million standard Olympic-sized swimming pools) available every year for extraction.

First Nations people and Aboriginal communities across NSW have deep cultural and social connections to groundwater, which plays an important role in their caring for Country.

Groundwater directly contributes close to \$1 Billion to the NSW economy from agriculture, industry and other activities that rely on groundwater.

Groundwater supplies around 10% of the state's drinking water, with more than 250 regional towns depending on groundwater for their day-to-day water needs.

NSW has important ecosystems that depend on groundwater, covering 6.5 million hectares or 8% of the state's land surface and more than 1,000 unique plant types dependent on groundwater (69 of which are threatened).

QUESTION: How does this strategy align with the other water strategies released by the Department?

The NSW Government is delivering a suite of water strategies for the state. These include: the NSW Water Strategy, this NSW Groundwater Strategy, the Aboriginal Water Strategy, 12 regional water strategies, and two metropolitan water strategies.

The NSW Water, NSW Groundwater and Aboriginal Water strategies focus on common state-wide challenges and actions relevant across different regions. On the other hand, the regional and metropolitan water strategies are place-based – putting forward local solutions to address specific problems in each region and metropolitan area.

Arising from the NSW Water Strategy (Action 3.6), the Draft NSW Groundwater Strategy provides an enhanced, state-wide focus on sustainable groundwater management needed for the next 20 years.

QUESTION: How will this strategy be funded?

This Draft Groundwater Strategy stems from an action in the NSW Water Strategy.

The NSW Government is committed to develop and deliver a strategic approach to looking after the state's water resources. The NSW Government Budget for 2022-2023 includes: \$19.8 million over the next three years to begin implementing the NSW Water Strategy including:

- Delivering the state's first Groundwater Strategy
- A dedicated Aboriginal Water Strategy
- Developing Southern Floodplain Management Plans.
- Some of this money will be used to initiate implementation

The Strategy has a 20-year implementation horizon. An implementation plan will be released alongside the final strategy establishing the necessary steps to deliver the 12 actions included in the strategy. The Department will be costing and prioritising each of the actions and will coordinate and liaise internally and with different agencies to establish roles and responsibilities for the delivery of each action. Such implementation plan will also include Monitoring, Evaluation and Reporting to regularly track the delivery of each action.

QUESTION: How was the draft groundwater strategy developed?

The draft NSW Groundwater Strategy is evidence-based and has been developed through a whole-of-government approach and the technical input of world-class experts.

Since 2021, the draft strategy has brought together leading technical and other groundwater-related advice via an Interagency Advisory Panel (nine NSW Government agencies) and an Expert Advisory Panel (four internationally renowned groundwater experts) along with new scientific evidence.

QUESTION: How did you assess the impact of climate change on groundwater resources?

As part of the delivery of this Draft NSW Groundwater Strategy, the Department has commissioned an independent study to understand the impact of climate change on groundwater recharge in NSW.

We've used new climate scenarios developed by the Department that incorporate long-term climate variability and a projected dry future climate (2060-2079 relative to 1990-2009), to assess for the first time changes to diffuse and localised recharge across all groundwater sources in NSW.

This new understanding has informed the development of regional and state-wide water strategies for the NSW DPE, identifying climate change as a key driver requiring adaptive responses to ensure sustainable groundwater management.

Combining these diffuse and localised recharge change estimates, we developed indices to quantify aquifer sensitivity and stress to recharge changes. This allowed us to rank groundwater sources according to their vulnerability to the projected recharge reductions, enabling us to prioritise those potentially most at risk from climate change in terms of available resources.

The CSIRO report will be released alongside the final strategy.

QUESTION: How did you assess the economic value of groundwater and came up with that figure of \$1 billion dollars?

The Department commissioned a project to understand the value of groundwater to NSW. This included characterising groundwater usage in NSW by key user group using metered extraction data and estimating

the value of groundwater under a range of extraction scenarios. The categorisation by economic user group was based on a combination of access licence holder name matching to industries, using the local water utility dataset, licence information, GIS land use mapping, and ABS data. More information about the methodology used will be available in Appendix D of the Guide to Groundwater Resources in NSW.

QUESTION: Are you going to reduce groundwater extraction limits as part of the delivery of this strategy?

NSW has committed under the Basin Plan 2012 to manage groundwater extraction to the sustainable diversion limits. The Basin Plan, including sustainable diversion limits, will be reviewed in 2026.

As part of the long-term actions required to improve sustainable groundwater management under this Strategy, we are proposing a review of groundwater extraction limits to inform future water sharing plan revisions. This review will consider the latest and best available climate data, including how groundwater availability will be impacted by a more variable future climate.

We also aim to improve recharge estimates with up-to-date information and incorporate new information to assess environmental and socio-economic risks

It is important that extraction limits support sustainable groundwater use, so they can sustain communities, industry and the environment now and for generations to come.

QUESTION: What is the Draft NSW Groundwater Strategy doing to improve access to groundwater for Aboriginal communities?

First Nations people and Aboriginal communities have deep cultural and social connections to groundwater, which plays a key role in their caring for Country.

The Draft NSW Groundwater strategy will bolster recognition of Aboriginal people's rights to access and use groundwater, and for the first time, culturally significant and valuable sites that are groundwater-dependent will be recognised and protected.

The Draft Strategy has specific actions aimed at improving access to groundwater for Aboriginal Communities, including:

- Increasing access to groundwater for Aboriginal people, by implementing any Closing the Gap targets relating to groundwater entitlements and use and where of benefit to Aboriginal people or communities, reserve entitlements made available under the groundwater controlled allocations process for Aboriginal people
- Protecting groundwater dependent places of significance for Aboriginal people, with a program to provide statutory protection to groundwater-dependent cultural sites and values in a culturally appropriate way.
- Better integrate Aboriginal knowledge into our groundwater management framework, including a program to empower Aboriginal people to fully participate in groundwater management.

QUESTION: Strategic Priority 2 emphasizes the need to secure groundwater supply for regional towns. Will the department issue new groundwater entitlements to local water utilities?

There are over 450 towns in regional NSW depending solely or partially on groundwater.

Applications for new specific purpose access licence made by councils for additional or emergency requirements are assessed by the Department and dealt with on a case-by-case basis (i.e access available only during emergency periods or purchase of shares through the market).

The impacts of any increased extractions are assessed using the Department's assessment criteria.

Under the new regulatory and assurance framework for local water utilities delivered by the Town Water Risk Reduction Program, the department expects local water utilities to have in place effective, evidence-based strategic planning in order to meet the needs of their customers, and manage key risks. The department establishes what outcomes it expects effective, evidence-based strategic planning to achieve.

At the same time, the recently released NSW Government Budget for 2022 includes:

- a. \$102.3 million committed as part of the Independent Pricing and Regulatory Tribunal final price determinations to be used for water planning and management and rural bulk water services in New South Wales
- b. \$82.2 million over three years as part of a joint \$92.5 million investment from the New South Wales and Federal Governments to improve critical water supply infrastructure for the towns of Wilcannia and Cobar, including the new Wilcannia Weir and Nyngan, Hermidale and Cobar pump stations
- c. \$369.6 million over the next four years for the Safe and Secure Water program, including \$90 million in new funding to expand the program, which co-funds vital water and sewerage infrastructure projects

QUESTION: What assumptions does the Draft NSW Groundwater Strategy make about mining into the future?

The Draft NSW Groundwater Strategy is aligned with other strategies from the NSW Government when it comes to taking a responsible, balanced approach to the effects of the global transition to a low carbon future.

The strategy assumes a modest increase of groundwater demand for mining and extractive industries over the next 20 years (by around 13% according to draft estimates) even though a decline in the production of thermal coal is predicted.