

## NSW Great Artesian Basin Water Sharing Plan - outcomes of public exhibition

The *Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008* is due to expire on 30 June 2020. In line with the *Water Management Act 2000*, the Natural Resources Commission completed its independent review of the plan in 2018 and recommended plan replacement.

The plan will be replaced by the *Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2020*. As part of the planning process, the draft water sharing plan was publicly exhibited from 20 February 2020 to 30 March 2020.

The public exhibition period provided valuable feedback from stakeholders. This fact sheet outlines the key issues that were considered by the NSW Department of Planning, Industry and Environment (the Department) and provide a response to those issues.

### Submissions

We received 20 submissions on the draft *Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2020*. The submissions raised over one hundred and twenty issues for consideration.

The issues raised in each submission were sorted into three broad categories – requiring further consideration, out of scope, and requiring clarification only.

### How issues were considered

The NSW Department of Planning, Industry and Environment examined the nature of the issue raised and considered the follow questions for each:

- Is the issue within the scope of the water sharing plan?
- Is consistent with the *Water Management Act 2000*?
- Is the issue a misunderstanding of the water sharing plan?
- Are existing programs/processes or other departments addressing the issue?
- Does it relate to water charges, costs, operational activities or licensing matters outside of the scope of the water sharing plan?
- Is it likely to have an impact on water availability for basic landholder right users and licence holders, and if so, how?
- Can current statutory mechanisms enable the change, or is legislative change required?
- Is it consistent with current policy settings, and if not, is development of robust alternative, policies feasible within the timeframe to develop the water sharing plan?
- Are there additional costs for the NSW Government?
- Is a full investigation of the issues feasible within the timeframe of developing the water sharing plan?

## Key issues raised from public consultation

Based on the considerations outlined above, the Department completed an assessment of all the issues raised in submissions. Seven key issues fell into the category of requiring further consideration. After this consideration, one additional change to the draft water sharing plan was made. These key issues, and the Department response, are as follows:

Key issue raised	NSW Department of Planning, Industry and Environment response
<p>The inclusion of future water savings, from cap and pipe projects in the extraction limit for the three artesian groundwater sources</p>	<p>No change to draft exhibited plan.</p> <p>The extraction limits for the artesian groundwater sources (Surat, Warrego and Central) include 30% of future water savings made under cap and pipe projects. This is consistent with the 2008 extraction limit and does not represent a change to the intent.</p> <p>Water to meet basic landholder rights in these three groundwater sources is currently being delivered through inefficient infrastructure (uncontrolled bores and open drains). The Department has estimated the current volume of water being ‘lost’ by these means which represents the current estimated volume of future water savings for each groundwater source. Seventy percent of these future water savings will be committed as environmental water, remaining in the system to improve pressure levels. Thirty percent of these future water savings would be included in the extraction limit as per the 2008 limit, providing opportunities for regional NSW. These percentages are consistent with the funding agreement with the Commonwealth Government for the cap and pipe projects.</p>
<p>Strategy in the 2008 water sharing plan to phase out bore drains, not carried over to the 2020 water sharing plan</p>	<p>Change made to the draft exhibited plan.</p> <p>A strategy to phase out the use of bore drains will be added to the 2020 water sharing plan.</p> <p>This will be included as one of the strategies for reaching the targeted environmental objectives of the plan (protect the extent and condition of GDEs and prevent structural damage to the aquifers resulting from groundwater extraction). The strategy for reaching the targeted environmental objectives of the plan has been drafted as follows ‘to reduce the volume of water lost through inefficient infrastructure by phasing out the use of bore drains that deliver water for basic landholder rights’.</p> <p>Kilometres of bore drains no longer in use will be used as the performance indicator to measure the success of the strategy. This is also one of the metrics of the cap and pipe projects.</p>
<p>No rationale given for the throughflow percentage (60% of recharge) in the Eastern &amp; Southern Recharge Groundwater Sources</p>	<p>No change to draft exhibited plan.</p> <p>The long-term average annual extraction limits (LTAAELs) for the Eastern Recharge and Southern Recharge Groundwater Sources are equivalent to 70% of net recharge. Net recharge represents the recharge volumes less a volume of ‘throughflow’ to neighbouring groundwater sources. The throughflow volume for these two</p>

	<p>groundwater sources in the 2008 plan was 60%.</p> <p>The <i>Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2020</i> retains the same 60% proportion of throughflow that was used in the 2008 plan.</p> <p>The Great Artesian Basin is a large system that recharges over long periods of time. Monitoring of water and pressure levels will continue over the next ten years and the information will be used to adaptively manage the system in the next plan.</p>
<p>Increased extraction limits for Eastern &amp; Southern Recharge Groundwater Sources as a result of increased recharge estimates</p>	<p>No change to draft exhibited plan.</p> <p>The LTAAELs for the Eastern Recharge and Southern Recharge Groundwater Sources are equivalent to 70% of net recharge. An independent consultant reviewed the recharge rates of these two groundwater sources and provided recommended recharge volumes to the Department to be used in the 2020 water sharing plan. The recommended recharge rates for the 2020 water sharing plan are an increase to those used in 2008 which resulted in an increase to the extraction limits.</p> <p>The consultants used the best available methods and science in providing their recommendations and the Department considers these estimates an improvement from 2008. The Department conducted a risk assessment in accordance with the macro groundwater risk assessment for the Eastern Recharge and Southern Recharge Groundwater Sources. This assessment approach is set out in “Macro water sharing plans – the approach for groundwater”. It considers ecological, water quality, aquifer integrity and socio-economic risks. Based on the outcomes of the risks assessments, 30% of net recharge is committed as environmental water and 70% is the volume that can be extracted (i.e. the extraction limit).</p> <p>Although the LTAAELs have increased, there is minimal change to the volume of water available for licenced requirements as the estimates basic landholder rights has also increased in these two groundwater sources as a result of an independent review of estimates for basic landholder rights for the 2020 water sharing plan.</p>
<p>The WSP should specify target pressure levels for the three artesian groundwater sources (Sarat, Warrego and Central). Water quality standards for the GAB should also be specified.</p>	<p>No change to draft exhibited plan.</p> <p>A Monitoring, Evaluation and Reporting (MER) Plan is being developed for the NSW Great Artesian Basin. The MER plan will describe the following:</p> <ol style="list-style-type: none"> <li>a) guidelines and principles for developing broad and targeted objectives, strategies and performance indicators,</li> <li>b) selection criteria for identifying priority monitoring locations for targeted objectives,</li> <li>c) selection criteria used to identify external influences that may affect the success of achieving objectives or implementing strategies,</li> <li>d) selection criteria used to determine how the objectives ‘to</li> </ol>

	<p>protect' will be measured by performance indicators.</p> <p>Further detail on pressure and water quality monitoring will be specified in the MER plan. The MER plan will be available on the NSW Department of Planning, Industry and Environment's website when completed.</p>
<p>Assumptions used to estimate basic landholder rights have underestimated requirements</p>	<p>No change to draft exhibited plan.</p> <p>An independent consultant provided the revised estimates for basic landholder rights for the 2020 water sharing plan. The Department is confident that the best available methods were used to determine the revised estimates. The methods used are also consistent with work undertaken in the QLD Great Artesian Basin.</p> <p>The basic landholder rights requirements identified in the plan are estimates of the volume of water being extracted under that right. The requirements identified in the plan in no way restricts the volume of water able to be extracted under that right. Water taken under a basic landholder right is not metered and not licenced and is one of the highest priority users of water under the <i>Water Management Act 2000</i>.</p>
<p>The merging of GAB Shallow with GAB</p>	<p>No change to draft exhibited plan.</p> <p>The GAB Shallow water sharing plan is part of the Commonwealth Murray Darling Basin Plan. Due to agreed commitments under the Murray Darling Basin Plan changes to water sources definitions would require complementary changes in the Murray Darling Basin Plan which would need to be navigated through the Australian Parliament. This is not achievable in the short to medium term. There is no natural resource management issue to address by the merging of the two water sharing plans, therefore a change is not required.</p>

## Issues raised that were out of scope

- A number of stakeholders raised concerns over Coal Seam Gas projects. The assessment of such projects are out of scope to the water sharing plan. These projects are assessed under the *Environmental Planning and Assessment Act 1979* by the Department of Planning, Industry and Environment (Planning and Assessment). If the development is a state significance or integrated development the Department of Planning, Industry and Environment (Water) assesses the potential impacts of any aquifer interference activity in accordance with the Aquifer Interference Policy and provides advice back to Planning and Assessment for their consideration in their determination of the project.

## More information

The *Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2020* and fact sheets are available from the NSW Department of Planning, Industry and Environment's website <https://www.industry.nsw.gov.au/water/plans-programs/water-sharing-plans>.

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