

## Proposed changes to groundwater sharing plans

The NSW water sharing plans are the primary legal framework for managing water access and sharing in the Murray-Darling Basin. Chapter 10 of the *Basin Plan 2012* requires that water resource plans are prepared to meet requirements set out by Commonwealth legislation. NSW is meeting these requirements by replacing, remaking or amending existing water sharing plans to meet the accreditation requirements of Chapter 10 of the *Basin Plan 2012*.

This factsheet is a summary of proposed changes to the groundwater sharing plan for the groundwater resources in the NSW Great Artesian Basin Shallow. In summary, changes are proposed to the:

- scope
- objectives, strategies, and performance indicators
- definition of planned environmental water
- estimated requirements for water
- definition of limits to the availability of water for extraction in the area
- measurement of compliance limits to the availability of water
- determination of annual permitted take
- distance rules for groundwater works
- ability to adjust the limits to the availability of water in line with s 7.25 of the Basin Plan.

The proposed changes to the plan range from purely administrative to more substantial. In general, the changes aim to modernise and simplify the watering sharing plan to make it easier to read while maintaining its legal accuracy. In addition, we have made changes to eliminate inconsistencies, inequities, and unintended implementation issues.

### Scope of the water sharing plan

A new water sharing plan called the 'Water Sharing Plan for the NSW Great Artesian Basin Shallow Groundwater Sources 2020' has been drafted. It is proposed that that this plan will replace the Water Sharing Plan for the NSW Great Artesian Basin Shallow Water Sources 2011.

This process will align the water sharing plan area with the NSW Great Artesian Basin Shallow Water Resource Plan Area, as defined in the *Basin Plan 2012*.

This water sharing plan includes a groundwater source that falls partly within and partly outside of the Murray Darling Basin; the Great Artesian Basin Central Shallow Groundwater Source. A single long term average annual extraction limit applies to the groundwater source. However, as the groundwater source spans the boundary of the Murray Darling Basin, part of the groundwater source will also be subject to a sustainable diversion limit under the Basin Plan, while the remaining part will not. As such this has required the division of the Great Artesian Basin Central Shallow groundwater source into two, these being the Great Artesian Basin Central Shallow - MDB groundwater source and the Great Artesian Basin Central Shallow – North Western groundwater source.

### Objectives, strategies and performance indicators

The objectives, strategies and performance indicators have been revised. The proposed new objectives, strategies and performance indicators of the WSP deal with similar matters to the previous ones, but have been changed to:

- link the objectives, strategies and performance indicators more strongly
- distinguish between the environmental, economic, social and Aboriginal cultural objectives more clearly.

## Definition of planned environmental water

We propose to change the way planned environmental water is specified in the water sharing plan. We will define it more accurately, including removing the reference to recharge. This change will not alter the actual volume of planned environmental water or the timing of its availability to the environment.

More information on this proposal is provided in the fact sheet *Specifying planned environmental water in groundwater plans*, available from [www.industry.nsw.gov.au/water](http://www.industry.nsw.gov.au/water).

## Estimated requirements for water

We have updated the estimated water requirements of basic landholder rights. We have also updated the total volumes or unit shares specified in the share components of all access licences to reflect current information.

## Aligning long-term average annual extraction limits to Basin Plan sustainable diversion limits

The *Basin Plan 2012* and more contemporary water sharing plans in NSW include a numerical estimate of basic landholder rights requirements that falls within the long-term limits to the availability of groundwater. The estimate of requirements for basic landholder rights and for extraction under access licences in the NSW Great Artesian Basin Shallow has changed to reflect the estimates used in the Basin Plan.

The long-term average annual extraction limits for the NSW Great Artesian Basin Surat Shallow, NSW Great Artesian Basin Warrego Shallow and the NSW Great Artesian Basin Central Shallow -MDB groundwater sources will align with the sustainable diversion limit resource units in the *Basin Plan 2012*. The NSW Great Artesian Basin Central Shallow – North Western groundwater source is outside of the *Basin Plan 2012* Water Resource Plan Area, and therefore does not need to align with any sustainable diversion limit resource units

To calculate the relevant proportion of the long term average annual extraction limit within the NSW Great Artesian Basin Central Shallow groundwater source, the percentage of the area of the groundwater source within the Murray-Darling Basin was measured to be 21%. The long term average annual extraction limit and basic landholder right volumes were then applied on this basis (i.e. 21% of the current volume). The residual amount (79%) applies to the NSW Great Artesian Basin Central Shallow – North Western groundwater source.

These proposed changes will have no impact on existing water access licence holders' shares or access to the resource.

## Compliance with long-term average annual extraction limits

We propose to change the period for assessing compliance with the long-term average annual extraction limit from the previous three years to the previous five years..

This change will make the assessment process consistent across the groundwater sources, and will provide some flexibility to accommodate climatic variability while still protecting environmental values.

No change is proposed to the trigger for requiring action to ensure compliance with the long-term average annual extraction limit. This will remain at 5% for the NSW Great Artesian Basin Surat Shallow, NSW Great Artesian Basin Warrego Shallow and the NSW Great Artesian Basin Central Shallow groundwater sources.

As previously, if extraction exceeds the triggers, the Minister can limit the available water determinations to lower priority access licences<sup>1</sup> to achieve compliance in the following year(s).

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<sup>1</sup> aquifer access licences or aquifer access (high security) aquifer access licences

We have also proposed an additional, alternative means to reach compliance. With this mechanism, the Minister may also limit the water allocation that can be taken, assigned under section 71T of the *Water Management Act 2000*, or otherwise debited or withdrawn, from a water allocation account, to achieve compliance. This method may reduce the need for more severe limits on available water determinations.

If compliance action is required, licence holders will be consulted on the most appropriate mechanism to achieve compliance with the long-term average annual extraction limit.

## Compliance with Basin Plan sustainable diversion limits

The existing water sharing plan specifies the process to assess compliance with the long-term average annual extraction limits. Additional provisions will be included that directly adopt the *Basin Plan 2012* provisions for assessing compliance with the Basin Plan long term average sustainable diversion limits.

The *Basin Plan 2012* requires an annual assessment of extractions against 'annual permitted take'. Annual permitted take will be defined for the NSW Great Artesian Basin Surat Shallow, NSW Great Artesian Basin Warrego Shallow and the NSW Great Artesian Basin Central Shallow - MDB groundwater sources as equivalent to the sustainable diversion limits (or long-term average annual extraction limits).

At the end of each water year take will be compared with the annual permitted take (or sustainable diversion limit) for each sustainable diversion limit resource unit. If actual take exceeds the annual permitted take a debit will be recorded, and conversely if actual take is less than the annual permitted take a credit will be recorded.

Under the *Basin Plan 2012*, there is non-compliance with a sustainable diversion limit when the cumulative balance is in debit by 20% or more of the sustainable diversion limit for a sustainable diversion limit resource unit.

If compliance action is required, the Minister may limit available water determinations and/or the water that can be taken from accounts in subsequent years, to bring actual take back to the sustainable diversion limit.

More information on these issues is in these fact sheets available from [www.industry.nsw.gov.au/water](http://www.industry.nsw.gov.au/water):

- Compliance with the sustainable diversion limit for groundwater
- Available water determinations in groundwater sources
- NSW MDB GAB Shallow – relationships between the water resource plan and water sharing plans.

## Standardising distance rules

We propose to standardise the rules for assessing applications for new and amended water supply works (bores). The proposed changes to rules are summarised below.

### Rules to minimise interference between users

There will no longer be a blanket exemption for basic landholder rights bores, however, the Minister may be satisfied upon hydrogeological assessment that allowing the work to be located at a lesser distance will have no more than minimal impact.

We proposed the following minimum distance requirements for the construction of new water supply works for the NSW Great Artesian Basin Surat Shallow, NSW Great Artesian Basin Warrego Shallow, the NSW Great Artesian Basin Central Shallow - MDB and NSW Great Artesian Basin Central Shallow – North Western groundwater sources:

- 200 metres from a supply work which provides for basic landholder rights only
- 100 metres from a boundary with a neighbour unless written consent is provided from the neighbour
- 1,000 metres from a water utility water supply works unless written consent is provided by the utility licence holder
- 400 metres from a government monitoring bore unless there is ministerial consent

- 400 metres from all other water supply works that take more than 20ML/year, and 200 metres from all other water supply works that take less than or equal to 20ML/year.

This is a distance change in relation to water supply works located from a boundary, local water utility and a government monitoring bore for NSW Great Artesian Basin Warrego Shallow, the NSW Great Artesian Basin Central Shallow - MDB and NSW Great Artesian Basin Central Shallow – North Western groundwater sources.

## Rules for water supply works located near contamination sources

New or amended water supply work approvals will not be granted:

- within 500 metres of a contamination source listed in Schedule 1 of the water sharing plan
- within 250 metres from the edge of a contamination plume
- between 250–500 metres of the edge of a contamination plume where drawdown will occur within 250 metres of the edge of the contamination plume.

We propose to introduce an additional rule for all groundwater sources, to reduce the risk to public health and safety from contaminated groundwater from on-site sewage disposal systems, as follows:

- A water supply work approval located within 250 metres of an on-site sewage disposal system may only be granted or amended if the water supply work is:
  - constructed with cement grout between the bore casing and the borehole annulus<sup>2</sup> to a minimum depth of 20 metres from the ground surface, and
  - located at sufficient distance from the on-site sewage disposal system to prevent septic contamination of the aquifer.

## Rules for water supply works located near groundwater-dependent ecosystems

The following minimum distance rules for the construction of new water supply works from high priority groundwater-dependent ecosystems are proposed for all groundwater sources as follows:

- 100 metres, if the work will take water for basic landholder rights only
- 200 metres for all other groundwater works, unless the Minister is satisfied that allowing the work to be located at a lesser distance will have no more than minimal impact, in all groundwater sources

## Additions to groundwater-dependent ecosystems schedules

Recent work by the NSW Department of Planning, Industry and Environment has identified additional high priority, groundwater-dependent ecosystems. We proposed to add the mapped extent these groundwater-dependent ecosystems as a water sharing plan schedule.

More detailed information on this proposal is provided in the fact sheet *NSW Great Artesian Basin Shallow – managing groundwater-dependent ecosystems*, available from [www.industry.nsw.gov.au/water](http://www.industry.nsw.gov.au/water)

## Removal of ‘local impact management’ and take ‘within restricted distances’ rules

Rules for granting new water supply works or amending existing water supply works will remain (as amended) in the water sharing plan, as outlined above. However, we propose to remove the provisions relating to restricting take from existing water supply works, specifically the rules for the use of water supply works

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<sup>2</sup> the space between the bore casing and the wall of the borehole

located within restricted distances for the NSW Great Artesian Basin Surat Shallow, NSW Great Artesian Basin Warrego Shallow and the NSW Great Artesian Basin Central Shallow - MDB and NSW Great Artesian Basin Central Shallow – North Western groundwater sources.

Contemporary advice is that the powers to restrict groundwater take from existing water supply works lie firmly within the *Water Management Act 2000* (the Act), and that their duplication and re-interpretation in water sharing plans may cause inconsistencies between the Act and the plan. This means that the Act will continue to provide the framework for groundwater take from existing water supply works.

The powers in the Act enable the Minister, at any time, to specify a limit on the volume or rate of extraction from a water supply work to minimise impacts on other users, groundwater-dependent ecosystems, groundwater-dependent culturally significant areas; or for public health and safety reasons. The Minister may also condition or refuse an application for a dealing to effect these outcomes.

For transparency, the draft plan includes notes explaining these powers.

More details on the process for assessing groundwater applications for a new or amended water supply work approval or dealing, is provided in the fact sheet *Assessing groundwater applications*, available from [www.industry.nsw.gov.au/water](http://www.industry.nsw.gov.au/water)

## Adjustments to groundwater sustainable diversion limits

Section 7.25 of Basin Plan 2012 allows for the MDBA to propose ‘an adjustment of the sustainable diversion limit for a groundwater sustainable diversion limit resource unit if better information becomes available about the groundwater resources of the unit and the factors relevant to setting the sustainable diversion limit.

To allow for this, the new NSW Great Artesian Basin Shallow water sharing plan will contain a provision that allows for a s.7.25 adjustment, and in particular for Part 6 of the plan to be amended to modify long-term average annual extraction limits and hence sustainable diversion limits.

## More Information

The draft NSW Great Artesian Basin Shallow Water Resource Plan and other fact sheets are available from [www.industry.nsw.gov.au/water](http://www.industry.nsw.gov.au/water).

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