

## Relationship between the water resource plan and water sharing plan

*Water resource plans are being developed to meet the requirements of Chapter 10 of the Basin Plan 2012, made under the Commonwealth Water Act 2007.*

Water sharing plans are made under the NSW *Water Management Act 2000* (WM Act). They are, and will continue to be, the primary tool to define water-sharing arrangements in NSW. Water sharing plans are therefore a central component of each water resource plan, and have been amended to meet Basin Plan requirements where necessary.

This factsheet explains differences between the existing and the new groundwater water sharing plans for the Shallow NSW Great Artesian Basin. These changes are the result of aligning the groundwater water sharing plan with the *NSW Great Artesian Basin Shallow Water Resource Plan*, and include changes to the management area and how extraction limits are set.

You may also want to read the factsheet for proposed changes to the NSW Great Artesian Basin Shallow groundwater sharing plan

### Groundwater management areas

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 this plan will replace the *Water Sharing Plan for the NSW Great Artesian Basin Shallow Water Sources 2011*.

The new plan will be called the *Water Sharing Plan for the NSW Great Artesian Basin Shallow Groundwater Sources 2020* and will align with the boundaries set for the NSW Great Artesian Basin Shallow water resource plan area under the *Basin Plan 2012* ('the Basin Plan'). 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*.

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.

The new water sharing plan will then include three of the sustainable diversion limit resource units specified in the *Basin Plan 2012*:

- the NSW Great Artesian Basin Surat Shallow
- the NSW Great Artesian Basin Warrego Shallow
- the NSW Great Artesian Basin Central Shallow

### Extraction Limits

The Basin Plan sets extraction limits, known as 'sustainable diversion limits', for each of the sustainable diversion limit resource units. These limits are equal to the long-term average annual extraction limits for the equivalent groundwater sources in the water sharing plan.

The relationships between key elements of Basin Plan sustainable diversion limits and the long-term average annual extraction limits in the draft *Water Sharing Plan for the NSW Great Artesian Basin Shallow Groundwater Sources 2019* are shown in Table 1.

**Table 1. NSW Great Artesian Basin Shallow—relationship between the water resource plan and water sharing plan**

Specified in Schedule 4 of the Basin Plan		Specified in Part 6 of the <i>Water Sharing Plan for the NSW Great Artesian Basin Shallow Groundwater Sources 2019</i>	
Sustainable diversion limit resource unit	Sustainable diversion limit	Groundwater source	Long term average annual extraction limit
NSW Great Artesian Basin Surat Shallow	<b>15.5 GL/yr</b> 14.52GL/yr (groundwater) 0.98GL/yr (basic rights)	NSW Great Artesian Basin Surat Shallow	<b>15,500ML/yr</b>
NSW Great Artesian Basin Warrego Shallow	<b>33.4GL/yr</b> 32.75GL/yr (groundwater) 0.65GL/yr (basic rights)	NSW Great Artesian Basin Warrego Shallow	<b>33,400ML/yr</b>
NSW Great Artesian Basin Central Shallow	<b>8.83GL/yr</b> 8.59 GL/yr (groundwater) 0.24GL/yr (basic rights)	NSW Great Artesian Basin Central Shallow - MDB	<b>8,830ML/yr</b>
Outside the WRP Area	<b>Not applicable</b>	NSW Great Artesian Basin Central Shallow – North Western	<b>114,986ML/yr</b>

## Differences in managing compliance with extraction limits

Groundwater extraction within the area of the new NSW Great Artesian Basin Shallow water sharing plan will need to meet these three sustainable diversion limits. Compliance will be assessed by calculating the maximum volume of water permitted to be taken in a water year<sup>1</sup>, known as ‘annual permitted take’, and comparing this to the volume actually taken in that year. The difference is then recorded on a ‘register of take’ as a debit or a credit.

Annual permitted take is calculated *retrospectively* at the end of a water year, after assessing the volume of water that was allowed to be extracted in that water year under the water resource plan rules. It does not directly determine how much water a licence holder can take in any water year, but is the benchmark against which total annual consumptive use from a resource unit will be compared.

The comparison is solely to assess compliance with the sustainable diversion limit over time. At the end of each water year, actual take will be compared with the annual permitted take or suitable diversion limit for each sustainable diversion limit 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.

Until 2028, non-compliance with a sustainable diversion limit is defined as when the cumulative balance is in debit by an amount that is equal to 20% (or more) of the sustainable diversion limits for that sustainable diversion limit resource unit.

For the NSW Great Artesian Basin Surat Shallow, the NSW Great Artesian Basin Warrego Shallow, and the NSW Great Artesian Basin Central Shallow - MDB groundwater sources, the annual permitted take for each is equal to the sustainable diversion limit, which in turn is equal to the long-term average annual extraction limit.

Water sharing plans also require extractions to comply with the long-term average annual extraction limits for each groundwater source. The plans specify that compliance is assessed by comparing the long-term average annual extraction limit to the average annual volume of water extracted over the preceding five years.

<sup>1</sup> A water year is a 12 month period commencing 1 July.

Non-compliance with the long-term average annual extraction limit occurs when this calculated average annual extraction exceeds the long-term average annual extraction limit by 5% in the NSW Great Artesian Basin Surat Shallow, the NSW Great Artesian Basin Warrego Shallow, and the NSW Great Artesian Basin Central Shallow - MDB groundwater source.

If either of these two assessment processes shows a breach of a sustainable diversion limit or a long-term average annual extraction limit, future extraction from the groundwater source will be restricted. This can be by one or both of the following methods:

- announcing available water determinations of less than 100% (or 1 ML/unit share) for lower priority access licences in the following year
- restricting the water allocations that can be taken (assigned under section 71T of the Act) or otherwise debited or withdrawn, from a water allocation account in the following water year.

Extraction restrictions will be what is necessary to return average annual extractions in the groundwater source to the long-term average annual extraction limit specified in the water sharing plan for the groundwater source, or to meet the requirements of Division 3 of Part 4 of Chapter 6 of the Basin Plan.

## 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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