

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 Namoi. These changes are the result of aligning the groundwater water sharing plan with the *Namoi Alluvium 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 Namoi Alluvium groundwater plan.

Groundwater management area

The current water sharing plan for the Upper and Lower Namoi groundwater sources expires on 1 July 2019. It is being replaced and revised as part of the water resource planning process. The new plan will be called the *Water Sharing Plan for the Namoi Alluvial Groundwater Sources 20XX*, and will align with the boundaries set for the Namoi Alluvium water resource plan area under the *Basin Plan 2012* ('the Basin Plan'). That means that the new water sharing plan will manage new areas, and include provisions for these.

As well as the existing provisions, the new water sharing plan will include provisions for the Peel Alluvium groundwater sources, currently included in the *Water Sharing Plan for the Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010*. It will also include provisions for the Manilla Alluvial, Currabubula Alluvial, Quipolly Alluvial and the Quirindi Alluvial groundwater sources. These groundwater sources are currently collectively referred to as the Namoi Alluvial Groundwater Sources in the *Water Sharing Plan for the Namoi Unregulated and Alluvial Water Sources 2012*.

To align with the water resource units specified in the Basin Plan, we are proposing to split the existing Namoi Alluvial Groundwater Sources into the Manilla Alluvial groundwater source and the Upper Namoi Tributary Alluvium groundwater sources. The Upper Namoi Tributary Alluvium groundwater sources would consist of the Currabubula, Quipolly and Quirindi Alluvial groundwater sources.

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

- the Lower Namoi Alluvium
- the Upper Namoi Alluvium
- the Peel Valley Alluvium
- the Manilla Alluvium
- the Upper Namoi Tributary Alluvium.

The extraction limits for these areas, and the water sharing plan area overall, are explained below.

Extraction Limits

The Basin Plan sets extraction limits, known as 'sustainable diversion limits', for each of the sustainable diversion limit resource units. Except in the Upper Namoi, these limits are equal to the long-term average annual extraction limits for the equivalent groundwater sources in the water sharing plan. There is a single sustainable diversion limit that is the sum of the individual long-term average annual extraction limits for 12 Upper Namoi groundwater sources in the water sharing plan.

Details of these fundamental relationships between key elements of the Basin Plan and the draft *Water Sharing Plan for the Namoi Alluvial Groundwater Sources 2019* are shown in Table 1.

Table 1. Namoi Alluvium—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 Namoi Alluvial Groundwater Sources 2019</i>	
Sustainable diversion limit resource unit	Sustainable diversion limit	Groundwater source	Long term annual alluvial extraction limit
Lower Namoi Alluvium	88.3 GL/yr	Lower Namoi Alluvial	88, 255 ML/yr
Upper Namoi Alluvium	123.4 GL/yr	Upper Namoi Alluvial (all)	123,403 ML/yr
Peel Valley Alluvium	9.34 GL/yr	Peel Alluvium	9,344 ML/yr
Manilla Alluvium	1.23 GL/yr	Manilla Alluvial	1,229 ML/yr
Upper Namoi Tributary Alluvium	1.77 GL/yr	Upper Namoi Tributary Alluvium	1,767 ML/yr

Differences in managing compliance with extraction limits

Groundwater extraction within the area of the new Namoi groundwater sharing plan will need to meet these five sustainable diversion limits. Compliance will be assessed by calculating the maximum volume of water permitted to be taken in a water year¹, 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 longer term sustainable diversion limit over time. 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 groundwater resource unit.

For the Manilla Alluvial and the Upper Namoi Tributary Alluvium 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.

The annual permitted take for the Lower Namoi, Upper Namoi and Peel Alluvium groundwater sources varies each water year based on the deviation of actual annual rainfall from the average annual rainfall measured at Narrabri, Gunnedah and Tamworth. The annual permitted take volume will not be more than 120% or less than 80% of the sustainable diversion limit. This climate-adjusted annual permitted take recognises that in dry years, extraction will generally exceed the sustainable diversion limit, and in wet years it will be less.

Water sharing plans also require management to 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.

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 either:

- 5% in the Upper and Lower Namoi groundwater source
- 10% in the Manilla Alluvial and Upper Namoi Tributary Alluvium groundwater sources
- 15% in the Peel Alluvium groundwater source.

¹ A water year is a 12 month period commencing 1 July.

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:

- 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.
- Announcing available water determinations of less than 100% (or 1 ML/unit share) for lower priority access licences in the following 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 Namoi Alluvium Water Resource Plan and other fact sheets are available from www.industry.nsw.gov.au/water

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