

Relationship between the water resource plan and water sharing plan

Water resource plans (WRPs) 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 Darling Alluvium. These changes are the result of aligning the groundwater water sharing plan with the *Darling 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 Darling Alluvial water sharing plan.

Groundwater management areas

A new water sharing plan called the *Water Sharing Plan for the Darling Alluvial Groundwater Sources 2020* is being drafted as part of the water resource planning process. The new water sharing plan will align with the boundaries set for the Darling Alluvium water resource plan area under the *Basin Plan 2012* ('the Basin Plan').

We propose that this plan replaces the *Water Sharing Plan for the Lower Murray-Darling Unregulated and Alluvial Water Sources 2011* in relation to the Lower Darling Groundwater Source, the *Water Sharing Plan for the Intersecting Streams Unregulated and Alluvial Groundwater Sources 2011* in relation to the Paroo Alluvial and Warrego Alluvial Groundwater Sources and the *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012* in relation to the Upper Darling Alluvial Groundwater Source.

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

- the *Upper Darling Alluvium*, which includes the Paroo Alluvial Groundwater Source, the Warrego Alluvial Groundwater Source, and the Upper Darling Groundwater Source
- the *Lower Darling Alluvium*, which includes the Lower Darling Alluvial Groundwater Source.

Extraction Limits

The Basin Plan sets extraction limits, known as 'sustainable diversion limits', for each of the sustainable diversion limit resource units. The relationship between the Basin Plan sustainable diversion limits and the long term average annual extraction limits in the draft *Water Sharing Plan for the Darling Alluvial Groundwater Sources 2020* are shown in Table 1. To achieve the sustainable diversion limit in the Upper Darling Alluvium sustainable diversion limit resource unit, we propose to decrease the long-term annual extraction limits for the Upper Darling, Paroo and Warrego alluvial groundwater sources. There will be no material impact on users of this change, as the sum of current licensed entitlements and estimates of take under basic rights is less than these new long-term annual extraction limits.

Table 1. Darling Alluvium—relationship between the water resource plan and water sharing plan

Specified in the Basin Plan		Specified in Part 6 of the draft <i>Water Sharing Plan for the Darling Alluvial Groundwater Sources 2020</i>	
SDL resource unit	SDL	Groundwater Source	LTADEL
Upper Darling Alluvium	6.5 GL/yr	Upper Darling Alluvial	6,009 ML/yr
		Warrego Alluvial	289 ML/yr
		Paroo Alluvial	292 ML/yr
Lower Darling Alluvium	2.23 GL/yr	Lower Darling Alluvial	2,230ML/yr

Differences in managing compliance with extraction limits

Groundwater extraction within the area of the new Darling Alluvial water sharing plan will need to meet these two 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 sustainable diversion limit over time. At the end of each water year, actual take will be compared with the annual permitted take (or sustainable diversion limit) for each SDL 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. 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 limit for that sustainable diversion limit resource unit.

For the Upper Darling, Warrego and Paroo alluvial groundwater sources, the combined annual permitted take is equal to the sustainable diversion limit for the Upper Darling Alluvium, which in turn is equal to the combined long-term average annual extraction limits for these groundwater sources (Table 1). For the Lower Darling alluvial groundwater source the annual permitted take is equal to the sustainable diversion limit for the Lower Darling Alluvium, which in turn is equal to the long-term average annual extraction limit for the Lower Darling alluvial groundwater source.

Water sharing plans also require extraction to comply with 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:

- 10% for the Lower Darling Alluvial groundwater source and
- 5% for the Upper Darling Alluvial, Warrego Alluvial and Paroo Alluvial groundwater sources.

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:

- 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 *Water Management Act 2000*, or otherwise debited or withdrawn, from a water allocation account in the following water year

Extraction restrictions will be as 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 Darling Alluvium Water Resource Plan and other fact sheets are available from industry.nsw.gov.au/water-resource-plan-consultation

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