

## 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 alluvial groundwater resources in the Darling. 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 with limits to the availability of water
- Determination of annual permitted take
- Access rules
- Distance rules for groundwater works
- Regard to interstate groundwater sources
- 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 and put in place, 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 Darling Alluvial Groundwater Sources 2020*' has been drafted. It is proposed that that this plan will replace:

- the *Water Sharing Plan for the Lower Murray-Darling Unregulated and Alluvial Water Sources 2011* in relation to the Lower Darling Alluvial 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.

This process will align the water sharing plan area with the Darling Alluvium Water Resource Plan Area, as defined in the *Basin Plan 2012*, and deals with all substantial alluvial groundwater resources in Darling system in a single water sharing plan.

### Objectives, strategies and performance indicators

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

- link the objectives, strategies and performance indicators more strongly, and
- 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 [industry.nsw.gov.au/water-resource-plan-consultation](http://industry.nsw.gov.au/water-resource-plan-consultation).

## 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 the current information.

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

We propose to decrease the long-term annual extraction limits for the Upper Darling Alluvial, Paroo Alluvial and Warrego Alluvial groundwater sources to be more aligned with the sustainable diversion limit for the Upper Darling Alluvium SDL resource unit established in the *Basin Plan 2012*. This means more environmental water will be retained in these systems in the future. There will be no material impact on users by this change as the sum of current licensed entitlement and volumes taken under basic right remains less than the sustainable diversion limit established in the *Basin Plan 2012*.

The long-term annual extraction limit for the Lower Darling groundwater source will not be changed as it already aligns with the sustainable diversion limit for the Lower Darling Alluvium SDL resource unit.

More information on changes to long-term limits is provided in the fact sheet *Darling Alluvium WRP—relationships between the water resource plan and water sharing plans*, available from [industry.nsw.gov.au/water-resource-plan-consultation](http://industry.nsw.gov.au/water-resource-plan-consultation).

## Compliance with Basin Plan sustainable diversion limits

The existing water sharing plans specify the process to assess compliance with the long-term average annual extraction limits. Additional provisions will be included in the new water sharing plan 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 each groundwater sources, as follows:

- Annual Permitted take from the Upper Darling Alluvium SDL resource unit will be the combined long-term average annual extraction limits for Upper Darling, Paroo and Warrego alluvial groundwater sources - equivalent to the sustainable diversion limit for the Upper Darling Alluvium SDL resource unit.
- Annual Permitted Take from the Lower Darling Alluvium SDL resource unit will be the long-term average annual extraction limit for the Lower Darling Alluvial groundwater source – equivalent to the sustainable diversion limit for the Lower Darling Alluvium SDL resource unit.

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.

Under the *Basin Plan 2012*, there is non-compliance with a sustainable diversion limit if the cumulative balance is in debit by 20% or more of the sustainable diversion limit for an SDL 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 [industry.nsw.gov.au/water-resource-plan-consultation](http://industry.nsw.gov.au/water-resource-plan-consultation):

- *Compliance with the sustainable diversion limit for groundwater*
- *Available water determinations in groundwater sources*
- *Darling Alluvium WRP—relationships between the water resource plan and water sharing plans.*

## Access rules

Historically, specific access rules have applied to groundwater access licences in the Lower Darling Alluvial groundwater source. The licences to which these provisions apply resulted from applications made under an embargo exemption to access groundwater during drought conditions. To be eligible to apply, the applicant had to hold a surface water licence under the Water Act 1912 at the time of application and have established permanent plantings as of 30 June, 2003. The exemption was a special drought contingency measure to provide for the survival of permanent plantings at a time when there were very low surface water allocations.

While we intend to maintain provisions that limit access to groundwater in the Lower Darling to times of low surface water allocations to provide for the survival of permanent plantings, feedback from stakeholders suggests that the provisions as they are currently written may prevent this from occurring at critical times. Further feedback will be sought during public exhibition as to access rules which may achieve their original intent.

## Standardising distance rules

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

### Rules to minimise interference between users

There will be only minor change to these to better align rules across the four groundwater sources. The rules would apply unless the Minister is satisfied that allowing the work to be located at a lesser distance will have no more than minimal impact. Other changes are:

In the Upper Darling, Paroo, Warrego and Lower Darling alluvial groundwater sources, bores used solely for basic landholder rights must be:

- at least 100m from government observation bores

In the Paroo and Warrego alluvial groundwater sources, bores used solely for basic landholder rights must be:

- at least 100m from mapped high priority groundwater-dependent ecosystems (see below)

In the Upper Darling, Paroo and Warrego alluvial groundwater sources, new bores, other than those used solely for basic landholder rights, must be at least:

- 400 metres from a supply work which provides water used solely for basic landholder rights
- 200 metres from a boundary with a neighbour unless written consent is provided from the neighbour
- 400 metres from a water supply work on a neighbouring property nominated by another access licence accessing the same groundwater source
- 500 metres from a government monitoring bore unless there is ministerial consent.

In the Lower Darling alluvial groundwater source, new bores, other than those used solely for basic landholder rights, must be at least:

- 500 metres from a water utility water supply work unless written consent is provided by the utility licence holder

### Rules for water supply works located near contamination sources

In the Upper Darling, Paroo, Warrego and Lower Darling alluvial groundwater sources, new or amended water supply works approvals will not be granted:

- within 500 metres of a contamination source listed in Schedule 1 of the water sharing plan

The other rules remain unchanged:

- within 250 metres from the edge of a contamination plume
- between 250–500 metres from the edge of a contamination plume where drawdown will occur within 250 metres.

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>1</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

Unless the Minister is satisfied that allowing the work to be located at a lesser distance will have minimal impact at most on a groundwater-dependent ecosystem, new or amended water supply works approvals will not be granted within

- 100 metres of any other groundwater-dependent ecosystem if the work will only take water to meet basic landholder rights, and
- 200 metres of any other groundwater-dependent ecosystem for all other groundwater works

These rules represent no change to the ones that currently apply to the Upper Darling and Lower Darling alluvial groundwater sources, but are a change for the Paroo and Warrego alluvial groundwater sources which previously restricted works (other than for basic landholder rights) within 2000m of a groundwater-dependent ecosystem. The intent of the greater distance restriction specified in the previous water sharing plan was to protect significant habitat around groundwater-dependent ecosystems. No groundwater-dependent ecosystems had been identified for inclusion in the previous Schedule of groundwater-dependent ecosystems.

Recent work by the Department of Planning, Industry and Environment has identified additional high-priority, groundwater-dependent ecosystems. We propose to add the mapped extent of these groundwater-dependent ecosystems as a water sharing plan schedule. The proposed schedule of potential high priority groundwater-dependent ecosystems identifies extensive areas in the Paroo and Warrego alluvial groundwater sources. The setback distance rules for new water supply works outlined above will apply to these groundwater-dependent ecosystems. As a result, the proposed new water sharing plan rules provide greater protection of environmental assets in these groundwater sources.

More detailed information on this proposal is provided in the fact sheet *Darling Alluvium WRP— groundwater-dependent ecosystems*, available from [industry.nsw.gov.au/water-resource-plan-consultation](http://industry.nsw.gov.au/water-resource-plan-consultation)

### Removal of 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 about restricting take from existing water supply works.

<sup>1</sup> the space between the bore casing and the wall of the borehole

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, on groundwater-dependent ecosystems, or 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

## Regard to interstate groundwater sources

Section 10.05 of the *Basin Plan 2012* requires water resource plans to 'have regard to the management and use of any water resources which have a significant hydrological connection to the water resources of the water resource plan area'. To give effect to this, NSW will include in the new water sharing plan a clause that allows the plan to be amended to provide for inter-state trading between NSW and Victoria, and between NSW and Queensland. The clause will specify that such an amendment can only occur if, and when, an inter-state agreement and associated administrative arrangements are in place.

## 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 Darling Alluvial 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 Darling Alluvium 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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