

About the Darling Alluvium Water Resource Plan

This document answers frequently-asked questions about the Darling Alluvium Water Resource Plan and water resource plans in general.

What is a water resource plan?

Water resource plans are a key requirement of the Commonwealth Government's *Basin Plan 2012* (the Basin Plan). These plans outline how we manage each water resource in the Murray-Darling Basin to be consistent with the Basin Plan.

The NSW Department of Planning, Industry and Environment (the department) is currently developing nine water resource plans for surface water and eleven for groundwater to meet NSW's commitment to the Basin Plan.

The fact sheet *Water resource plans in NSW* provides more information industry.nsw.gov.au/water-resource-plan-consultation

What happens to water sharing plans?

The entire NSW portion of the Murray-Darling Basin is already covered by statutory water sharing plans. Water sharing plans are made under NSW legislation and will remain the primary mechanism for defining water sharing arrangements in NSW.

The department is developing water resource plans to meet requirements set out in the Basin Plan. These will directly adopt many of the provisions of water sharing plans.

Are water sharing plans being remade?

Water sharing plans are statutory plans made under the NSW *Water Management Act 2000*. In NSW, combined unregulated river and alluvial water sharing plans cover both surface water and groundwater resources within an area. The water resource plans under the Basin Plan cover surface water resources and groundwater resources separately.

For simplicity, and to align with the Basin Plan areas, NSW will separate the unregulated and alluvial water sharing plans.

In the Darling catchment, there will be a new single water sharing plan covering the alluvial groundwater resources associated with the Paroo and Warrego Rivers, and the Upper and Lower Darling River.

Will a water resource plan change my access to water?

There will be very few changes to the current rules for accessing the groundwater resources of the Darling, Warrego and Paroo. The planning process and Basin Plan requirements may result in some changes to groundwater access rules, but stakeholders will be consulted on proposed changes during the public exhibition period.

How are you consulting on water resource plans?

Stakeholder input is critical to the development of the NSW water resource plans. We are consulting the community through:

- public information and consultation sessions.
- a stakeholder advisory panel covering all groundwater water resource plan areas
- targeted engagement on valley-specific issues

- First Nation, Land Council and other Aboriginal organisations consultation to identify issues of importance to Aboriginal peoples

Each water resource plan will be on public exhibition for forty days. You can have your say by attending the public meetings and sending in a submission form that is available on the department's website (industry.nsw.gov.au/water-resource-plan-consultation).

What's the difference between long-term average annual extraction limits and sustainable diversion limits?

The 'long-term average annual extraction limit' is a term used in NSW water sharing plans to define the limit of water that can be taken for all purposes (including domestic and stock, urban, industrial, agricultural use and held environmental water) from each water source. The water sharing plan sets out the rules and assessment method to ensure these limits are being met.

The 'sustainable diversion limit' is a term used in the Commonwealth's Basin Plan to define limits on total extractions for human uses from a groundwater source or a group of groundwater sources in the Basin.

For the Darling Alluvium, sustainable diversion limits relate to the long-term average annual extraction limits in the *Darling Alluvial Water Sharing Plan 2020*. There are two sustainable diversion limits. One is for the Lower Darling Alluvium, and directly equates to the existing long-term average annual extraction limit for the Lower Darling alluvial groundwater source. The other is a single limit for the Upper Darling, Paroo and Warrego alluvial groundwater sources. The existing long-term average annual extraction limits for these three groundwater sources will be decreased to align with the Basin Plan sustainable diversion limit. This decrease will not impact on existing users as existing licensed entitlements and requirements for basic landholder rights are within the sustainable diversion limit.

How will NSW manage compliance to the long-term average annual extraction limits?

Each water sharing plan sets out the rules to assess compliance with each long-term average annual extraction limit. Assessing compliance involves calculating the average annual extraction over a specified period of time. The period currently varies between three and five years for different plans, but the department is proposing that the long-term average annual extraction limit compliance uses a five-year rolling average period in all Murray-Darling Basin groundwater sharing plans.

If a long-term average annual extraction limit is exceeded, the Minister for Water will do either or both of the following:

- limit the amount of water credited to lower-priority access licences (available water determinations).
- limit the take of water from water allocation accounts of lower-priority access licences

How is NSW managing compliance to the sustainable diversion limits?

The Basin Plan requires NSW to manage extractions within sustainable diversion limits. Compliance to a sustainable diversion limit is based on the concepts of actual take and permitted take.

The volume of water extracted during a water year¹ from a sustainable diversion limit resource unit is the annual actual take, and the volume that is allowed to be extracted during a water year is the annual permitted take. The difference between these two volumes is recorded on a register of take as a debit (when actual take is greater than permitted take) or a credit (when actual take is less than permitted take).

Over time, a cumulative balance accrues based on each year's credit or debit. For the first ten years of the plan, if the cumulative balance reaches a debit of 20% or more of the sustainable diversion limit for that groundwater source, then it is non-compliant.

If a sustainable diversion limit is exceeded, the Minister for Water will do either or both of the following:

- limit the amount of water credited to lower-priority access licences (available water determinations)
- limit the take of water from water allocation accounts of lower-priority access licences

For further information refer to the fact sheet *Compliance with sustainable diversion limits for groundwater* available from industry.nsw.gov.au/water-resource-plan-consultation.

Can the sustainable diversion limit be changed?

The Basin Plan set a sustainable diversion limit volume for each groundwater resource unit. The sustainable diversion limits can only be altered by the Murray-Darling Basin Authority if better information becomes available about the groundwater resources and the factors relevant to setting the SDL, in particular information about:

- (a) recharge rates; or
- (b) connectivity with surface water; or
- (c) usage patterns; or
- (d) Basin State policy and planning settings.

How will NSW address annual permitted take?

NSW proposes to set a variable annual permitted take for sustainable diversion limit resource units (groundwater sources) that have historically extracted more than 80% of the sustainable diversion limit. The proposed method is based on annual rainfall, where the volume permitted to be taken would increase in a dry year and decrease in a wet year.

This is the proposed method for the Lower Gwydir, Lower Murray Deep, Upper and Lower Namoi, Lower Murrumbidgee Deep, Mid Murrumbidgee, Lower Lachlan, Peel, Cudgegong and Upper Macquarie SDL (groundwater) resource units.

Where current use in a groundwater system is less than 80% of the sustainable diversion limit, annual permitted take will be fixed, and aligned with the sustainable diversion limit.

How will groundwater-dependent ecosystems be managed?

Groundwater-dependent ecosystems rely on groundwater to meet their water needs. The groundwater helps maintain plant and animal communities and ecological processes. Water sharing plans for groundwater have a schedule that identifies potential high priority groundwater-dependent ecosystems, and includes rules for protecting them such as offset distances for bores and other extractive works.

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

To manage groundwater-dependent ecosystems better, we propose to:

- add a map of recently identified potential high priority groundwater dependent ecosystems in the water sharing plan as a schedule.
- apply setback distance rules for new water supply works (bores).

The proposed new setback distances from a high priority groundwater-dependent ecosystem will be:

- 100 metres if the work will take water for basic landholder rights only
- 200 metres for all other groundwater works,

unless the Minister for Water is satisfied that allowing the work to be located at a lesser distance will have no more than minimal impact.

For more information, refer to the factsheet *Groundwater Dependent Ecosystems* available from industry.nsw.gov.au/water-resource-plan-consultation.

Are there changes to where I can locate a new bore?

The distance rules for setbacks from groundwater-dependent ecosystems and contamination sources will be the same across all groundwater sharing plans.

Setback distance rules from groundwater-dependent ecosystems for new water supply works are provided in the section above for the Darling Alluvium groundwater sources.

To reduce risks to public health and safety from contaminated groundwater, the department proposes to include:

- A rule prohibiting the location of a new or replacement work within 250 metres of an onsite sewage disposal system (for example septic tank) unless the work is constructed in such a way and depth that makes it unlikely to extract water contaminated by sewage
- Conditions that place the onus on the approval holder to ensure that the quality of water extracted is fit for the intended purpose.

There will be changes to other distance rules that currently apply in the Darling Alluvium SDL resource units, specifically:

- In the Upper Darling Alluvial, Paroo Alluvial, Warrego Alluvial 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 Alluvial and Warrego Alluvial groundwater sources, bores used solely for basic landholder rights must be at least 100m from mapped high priority groundwater-dependent ecosystem.
- In the Upper Darling Alluvial, Paroo Alluvial 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
 - 400 metres from a supply work nominated by an access licence
 - 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.

How does the department assess dealing (trade) applications in relation to groundwater impacts?

The potential impacts of groundwater extraction are managed through an assessment process applied to all applications for groundwater dealings (trade) and water supply works approvals (extractive works such as bores). These applications are received by either WaterNSW or the Natural Resource Access Regulator and then referred, as required, to the department for hydrogeological assessment.

The fact sheet *Assessing groundwater applications* provides details on the groundwater impact assessment criteria to be applied across the state. It does not propose any significant changes to the existing impact assessment criteria. You can see it at industry.nsw.gov.au/water-resource-plan-consultation.

What is happening with planned environmental water for groundwater sources?

Planned environmental water is committed for fundamental ecosystem health or other specified environmental purposes and cannot be taken or used for any other purpose. Planned environmental water rules are established in water sharing plans.

The *Basin Plan 2012* states a water resource plan must ensure that there is no net reduction in protection of planned environmental water from that provided under state water management law at the start of the Basin Plan in 2012.

In many existing groundwater water sharing plans, planned environmental water is specified as a volume of water equal to a set proportion of the long term average annual 'recharge' to the groundwater source. Although there will be no changes to the actual volume of planned environmental water, the timing of its availability, or how it is calculated in the water sharing plan, the way planned environmental water is specified in the water sharing plan will change.

The factsheet *Specifying planned environmental water* provides more information (industry.nsw.gov.au/water-resource-plan-consultation).

Are there proposed changes to access rules in the Lower Darling Alluvial groundwater source?

We propose to refine the access rule in the Lower Darling Alluvial groundwater source that prohibits take of groundwater unless the available water determination for surface water is 0% with restrictions on the allowable water quality extracted. This rule was in place to provide emergency water to irrigate long-term (plantation) crops while protecting the freshwater lens that constitutes the Lower Darling Alluvial from saline water intrusion. Feedback suggests this rule could be refined to better meet its original intent. Detailed feedback on the type of refinement that may be effective and suitable is sought from stakeholders as part of the public exhibition process.

What are the proposed changes to the water sharing plan rules that may affect me?

The proposed changes to the water sharing plan include:

In the Lower Darling Alluvial groundwater source:

- refine access rules that limit the take of groundwater during surface water scarcity

In the Upper Darling Alluvial, Paroo Alluvial and Warrego Alluvial groundwater sources:

- reduce the long-term average annual extraction limits
- increase the setback distance from other users for new water supply works

In the Paroo and Warrego Alluvial groundwater sources

- change setback rules for new water supply works located near high priority groundwater-dependent ecosystems

In all groundwater sources, include:

- rules for assessing compliance with the sustainable diversion limit. The new rules will mirror the process in the Basin Plan.
- rules that allow annual limits on the take of water in accounts, if the long term average annual extraction limit or sustainable diversion limit is exceeded.
- additional potential high priority groundwater-dependent ecosystems into the water sharing plan schedule.
- rules to reduce risks to groundwater from contamination sources

You should consider your specific circumstances to see how you will be affected by the changes.

More information

The draft Darling Alluvium Water Resource Plan and other fact sheets are available from www.industry.nsw.gov.au/water

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