

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 Industry (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-plans/general-resources).

How will the water resource plan affect me?

The entire NSW portion of the Murray–Darling Basin is already covered by statutory water sharing plans. These water sharing plans were 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 reference, and in some cases modify, the existing 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 groundwater 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. This will mean that there is a water sharing plan for groundwater, and another for surface water, for each water sharing plan area. This process will also mean merging some groundwater water sharing plans.

Will a water resource plan change my access to water?

There will be very few changes to the current rules for accessing water. The Basin Plan requires water resource plans to be developed and is not a driver for major access changes.

Water sharing plans produced under the *Water Management Act 2000* are the statutory instruments in NSW that establishes water sharing arrangements. The planning process may result in some changes to access rules within a water sharing plan, 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 open for comment during a forty day public exhibition period. You can have your say by sending in a submission form, available on the department's website. industry.nsw.gov.au/water-resource-plans-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 and 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 Murray Alluvium, sustainable diversion limits are the same as the long term average annual extraction limits in the *Murray Alluvium water sharing plan*. They will not change from the current limits.

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

Current NSW water sharing plans limit the amount of water that can be taken from a groundwater source by establishing a long-term average annual extraction limit. For the majority of groundwater sources in the Murray Darling Basin, the long term average annual extraction limits is equal to the sustainable diversion limits. Where the long-term average annual extraction limit is currently greater than the sustainable diversion limit, it will be amended to match the sustainable diversion limit.

In the Murray groundwater sources the long term average annual extraction limit now includes a volume of water that is held environmental water (access licences owned by the Commonwealth for environmental purposes). The long-term average annual extraction limit will be greater than the sustainable diversion limit by the volume of this held environmental water.

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 all long term average annual extraction limit compliance uses a five-year rolling average period in all Murray–Darling Basin water 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 take of water from water allocation accounts of lower-priority access licences
- limit the amount of water credited to lower-priority access licences (available water determinations).

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 limits is based on the concepts of 'actual take' and 'permitted take'.

The volume of water extracted during a water year from a sustainable diversion limits resource unit is the annual actual take, and the volume that is allowed to be extracted during a water year¹ 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 limits for that groundwater source, then there is non-compliance.

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

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

The fact sheet *Compliance with sustainable diversion limits for groundwater* provides more information (industry.nsw.gov.au/water-resource-plans/general-resources).

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.

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

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. This 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 distance restrictions from bores and other extractive works.

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

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

The proposed new distance for a river will be:

- 40 metres from a river
- 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.

The factsheet—*Groundwater-Dependent Ecosystems* provides more information industry.nsw.gov.au/water-resource-plans/general-resources

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 all groundwater dealings (trade) and water supply works approvals (extractive works such as bores). These applications are received by either WaterNSW or the Natural Resources Access Regulator and then if required, referred 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 significant changes to the existing impact assessment criteria . You can see it at: (industry.nsw.gov.au/water-resource-plans/general-resources).

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

The distance rules in relation to setbacks from groundwater-dependent ecosystems and contamination sources will be the same across water sharing plans.

Setback distance rules for new water supply works from groundwater-dependent ecosystems are provided in the section above for the Murray Alluvium groundwater sources will be:

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 a 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.

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 fact sheet *Specifying planned environmental water* provides more information (industry.nsw.gov.au/water-resource-plans/general-resources).

Has the depth boundary for the Lower Murray Shallow groundwater source changed?

Yes. We propose to increase the depth boundary of the Lower Murray Shallow groundwater source from 12 metres to 20 metres.

This depth has been determined, via modelling and desktop review of all available bore logs, to be the most appropriate depth of the Upper Shepparton formation layer, which conceptually forms the Lower Murray Shallow groundwater source. This change will not impact on any existing water access licences.

Are there any proposed changes to the water sharing plan rules that may affect me?

Yes, proposed changes include:

- changing the time period for assessing compliance to the long term average annual extraction limit from three to five years in the Lower Murray groundwater sources.
- additional rules for assessing compliance with the sustainable diversion limit. The new rules will mirror the process in the Basin Plan.
- additional 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.
- including additional potential high priority groundwater-dependent ecosystems into the water sharing plan schedule.
- new standard setback rules for water supply works located near high priority groundwater-dependent ecosystems
- Additional rules to reduce risks to groundwater from contamination sources.
- additional setback rules for water supply works to minimise the impacts between users. This will mean the blanket BLR exemption is removed.
- Additional setback rules for water supply works in the Lower Murray to minimise the impacts between users
- Variation in setback rules for water supply works in the Billabong Creek Alluvial, Upper Murray and Lower Murray Shallow groundwater sources
- Change in the depth boundary for the Lower Murray Shallow groundwater source
- Minor increase in the long term average annual extraction limit volumes to account for a volume of held environmental water.

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

More information

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

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