

Managing groundwater extraction to extraction limits

The amount of groundwater that all water users can extract each year from a groundwater source is limited. If extractions exceed extraction limits, the department may need to reduce groundwater access to return average groundwater extraction to these limits.

What are extraction limits?

New South Wales water sharing plans and the Murray–Darling Basin Plan set limits on how much all water users can extract from groundwater sources in inland NSW. The water available for extraction is shared among water users that include; Basic Landholder Rights, towns, communities and industry.

Long-term average annual extraction limits

Water sharing plans set a long-term average annual extraction limit for each groundwater source.

Water users can temporarily pump groundwater at higher volumes than the limit, if the water sharing plan allows unused allocations to be carried over and used in a subsequent year. This gives licence holders flexibility to respond to seasonal variations, such as drought, or changing business opportunities. In wet years, water users may pump less groundwater.

Although the amount all water users extract varies each year, on average it cannot exceed the long-term average annual extraction limit.

Before July each year, the department assesses whether average extraction by all water users over the last five years has exceeded the extraction limits, plus a buffer. The buffer is defined in the relevant water sharing plan and is typically 5% or 10%, although it may be 15% in some cases.

Sustainable diversion limits

The Australian Government's Basin Plan 2012 sets sustainable diversion limits for the amount of water that all users can extract from a groundwater source or a group of groundwater sources in the Murray–Darling Basin.

The maximum volume of water that all users are permitted to take is compared with the actual volume all users take each year. The difference between these two volumes is recorded as a debit (where annual actual take is greater than annual permitted take) or a credit (where annual actual take is less than annual permitted take).

Until 30 June 2028, extractions exceed a sustainable diversion limit when the cumulative balance since 1 July 2019 is in debit by 20% or more of the sustainable diversion limit. After June 2028, the compliance method will change.

What happens if extractions exceed extraction limits?

If extractions exceed extraction limits by the buffer percentage in the relevant water sharing plan, the department may need to reduce access in the following year(s) to return extractions to these limits. Groundwater access can be reduced in two ways:

- reduce the amount of water going into accounts (known as an **available water determination**)
- reduce the amount of water that users can take or trade from accounts (known as the **maximum water account debit**).

The department can use one or a combination of these methods to limit the volume of water that licence holders can access from their accounts to return average extraction to the limits.

Available water determinations

The department announces available water determinations (also called allocations) on 1 July each year. An available water determination adds water into a licensed groundwater user's water allocation account.

If extractions by all users exceed extraction limits, the department can reduce the available water determination for aquifer access licences, reducing the amount of water added to accounts. An additional available water determination can be made later in the water year, up to the maximum determination specified in the water sharing plan, if further assessment shows average extraction is below the extraction limit.

Maximum water account debit

Water is debited from accounts when a licence holder physically takes water from the groundwater source or trades water allocations to another licence holder.

Water sharing plans set the maximum volume a licence holder can debit from their account each water year, known as a maximum water account debit. The maximum water account debit is based on the number of shares held by a licence and the volume of allocation traded in. A licence holder can debit up to the volume in their account or the maximum water account debit, whichever is less.

If extractions exceed extraction limits, the department can reduce the maximum water account debit, that is, the maximum volume of water that can be debited from accounts to return extraction to the limits. The maximum water account debit may increase later in the water year, up to the maximum water account debit specified in the water sharing plan, if further assessment shows average extraction is below the extraction limit.

More information

For each groundwater source, [water sharing plans](#) define:

- long-term average annual extraction limit
- assessing compliance with the extraction limit (including the percentage buffer allowed) and compliance with the long-term sustainable diversion limit
- what actions can be taken if extractions exceed extraction limits.

You can find more information in the following fact sheets:

- [Available water determinations for groundwater](#), which describes what an available water determination is and how they are made
- [Compliance with long-term sustainable diversion limits for groundwater sources](#), which describes how annual permitted take is determined and how compliance is assessed with long-term sustainable diversion limits before and after 30 June 2028.

If you want to stay informed about all of the department's upcoming engagement activities on managing groundwater extraction to extraction limits, please visit:

www.dpie.nsw.gov.au/managing-access-to-groundwater

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