

Available water determinations for groundwater

An available water determination allocates water to licensed groundwater users. We announce available water determinations at the start of each water year on 1 July.

Water sharing plans set how much water can be taken from a groundwater source. The water available for extraction, as outlined in the plan, is shared between water users, including access licence holders.

Water access licences authorise a licence holder to take water from a groundwater source. At the start of each water year, we make available water determinations and give licence holders their water allocation. This credits water to their licence accounts.

The volume of water a licence holder can extract each year is set by the water account rules in the water sharing plan. In some groundwater sources, unused account water can be carried over from the previous year. The plan rules will define how much can be taken from the account each year and how much can be carried over into the next water year.

An available water determination allocates water to a category of access licence. There are various categories of access licence, such as town water supply or aquifer access licences.

An allocation can vary from year to year based on historic extraction patterns.

Before the start of each water year, we check the total extraction in a groundwater source. We do this by checking extraction data recorded by water meters at bores. Total extraction should be within the plan's extraction limit. Managing the extraction of groundwater ensures it is available now and for future generations. If extraction in a groundwater source is close to or exceeds the plan's limit, it may trigger a reduced available water determination.

Allocation of groundwater

Each water access licence has a water allocation account. An available water determination adds, or credits, water to the water allocation account. Physical take of water subtracts, or debits, water from the water allocation account. Buying or selling water gives licence holders flexibility when planning for variable seasonal conditions. We adjust water allocation accounts to reflect the exchange of water.

We describe water allocation in different ways, depending on the category of water access licence.

We give aquifer access licences allocations in unit shares of a groundwater source. An available water determination for an aquifer access licence is in megalitres per unit share (ML/share). For example, 0.8 ML/share is equal to 80% of an aquifer access licence holder's entitlement. Similarly, 1.0 ML/share is equal to 100% of an aquifer access licence holder's entitlement.

For domestic and stock, local water utility and other specific-purpose access licences, a licence holder's entitlement is given in megalitres of a groundwater source. An available water determination for these categories of access licence is set as a percentage of the access licence entitlement.

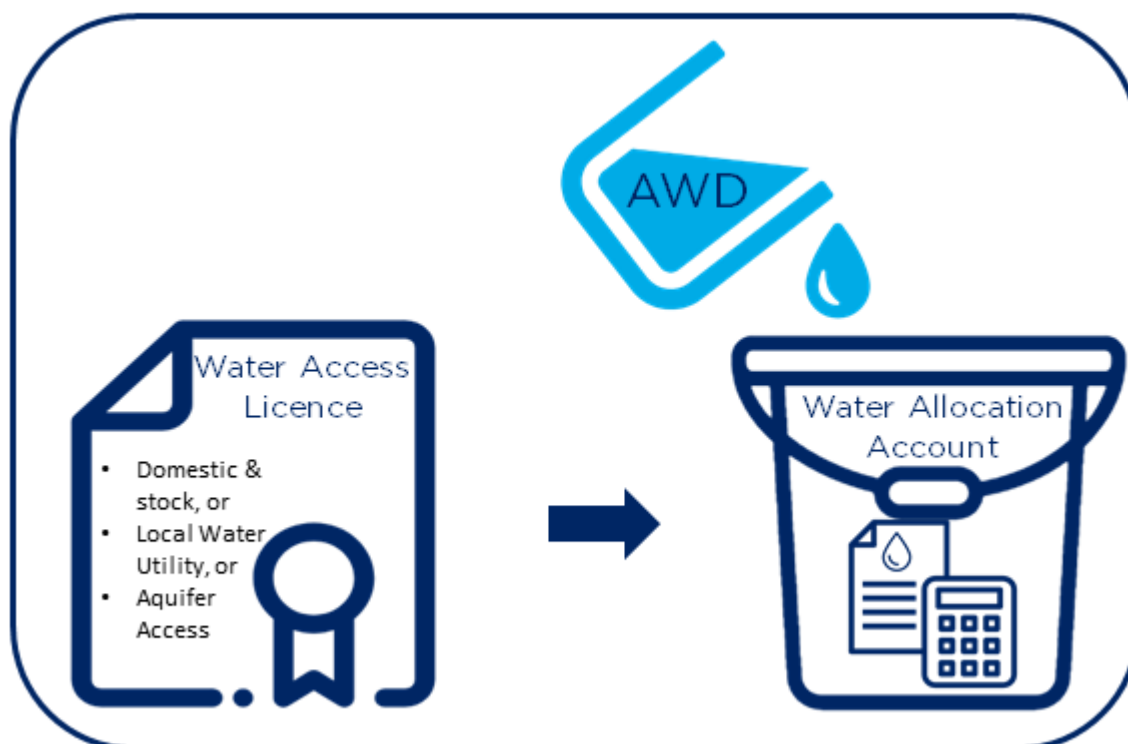


Figure 1. Available water determinations add water to water allocation accounts, which have different types of water access licence.

At the start of each water year licensed users receive an opening allocation for each licence category. This may be anywhere between 0% and 100% of their entitlement. The main licence categories in order of priority are:

- domestic and stock access licences and local water utility access licences;
- aquifer access licences.

Domestic and stock and local water utility access licences have priority over all other access licences. Because of this priority they generally receive 100% of their entitlement.

Licence holders who receive 100% of their entitlement will not receive further allocations for the rest of the water year—this applies to most access licence categories. We can provide further allocations to those who receive less than 100% of their entitlement on 1 July. We may provide additional allocations after further assessment and another available water determination, usually by October of the same water year. An available groundwater determination linked to a regulated river allocation will receive associated changes in the river allocation.

Water sharing plan extraction limits

Water sharing plans set a **long-term average annual extraction limit** for each groundwater source. The water sharing plan also limit extraction from a groundwater source or a group of groundwater sources in the Murray–Darling Basin by all water users to **sustainable diversion limits** set by the Australian Government’s Basin Plan 2012.

Water users can temporarily pump groundwater at higher volumes than the limits, 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 in weather conditions, such as drought or changing business opportunities. Although the amount all water users extract varies each year, on average it cannot exceed the long-term average annual extraction limit or the sustainable diversion limit.

Water sharing plans tell us:

- how to calculate annual extraction;
- assess compliance with extraction limits including outlining compliance triggers that define when extraction has exceeded limits; and
- what actions can be taken if extraction limits are exceeded.

If average extraction by all water users exceeds the compliance trigger for the long-term average annual extraction limit, or the sustainable diversion limit set out in the water sharing plan, the department may need to limit the volume of water that licence holders can access from their accounts in the following year/s to return average extraction by all users to the limit.

This can be done by:

- reducing the amount of water going into accounts (by reducing the **available water determination**);
- reducing the amount of water that can be taken or traded from accounts (by reducing the **maximum water account debit**); or
- a combination of these methods.

This means that, if one of the extraction limits are exceeded, aquifer access licence holders may not receive 1 ML/share or 100% each year.

Available water determination assessment

We consider a range of factors when determining how much water will be allocated to water users.

Before the start of each water year, we check the rolling average annual extraction against its limit for compliance. WaterNSW monitors and records groundwater metering data, which we use to make these comparisons for each groundwater source. If extraction in a groundwater source is close to the plan's compliance trigger, WaterNSW processes metering data as a high priority. This ensures we use the best available information to calculate a reliable estimate of extraction for the water year.

Not all groundwater meter readings can be finalised before the 1 July announcement, so we sometimes need to use projected annual water extraction to 30 June. When the data from water meters becomes available, we check our projections.

Up-to-date metering data will ensure the most reliable 1 July allocation calculation. We encourage licence holders to enter their meter readings on a regular basis into WaterNSW's iWAS system at www.watnsw.com.au/customer-service/ordering-trading-and-pricing/ordering/iwas

Figure 2 shows the rolling average annual extraction tracked against a plan's long-term average annual extraction limit and the compliance trigger. In this case, it is a five-year rolling average and a 5 % compliance trigger. A different method is used to assess if extractions exceed the sustainable diversion limit.

Annual usage and available water determination

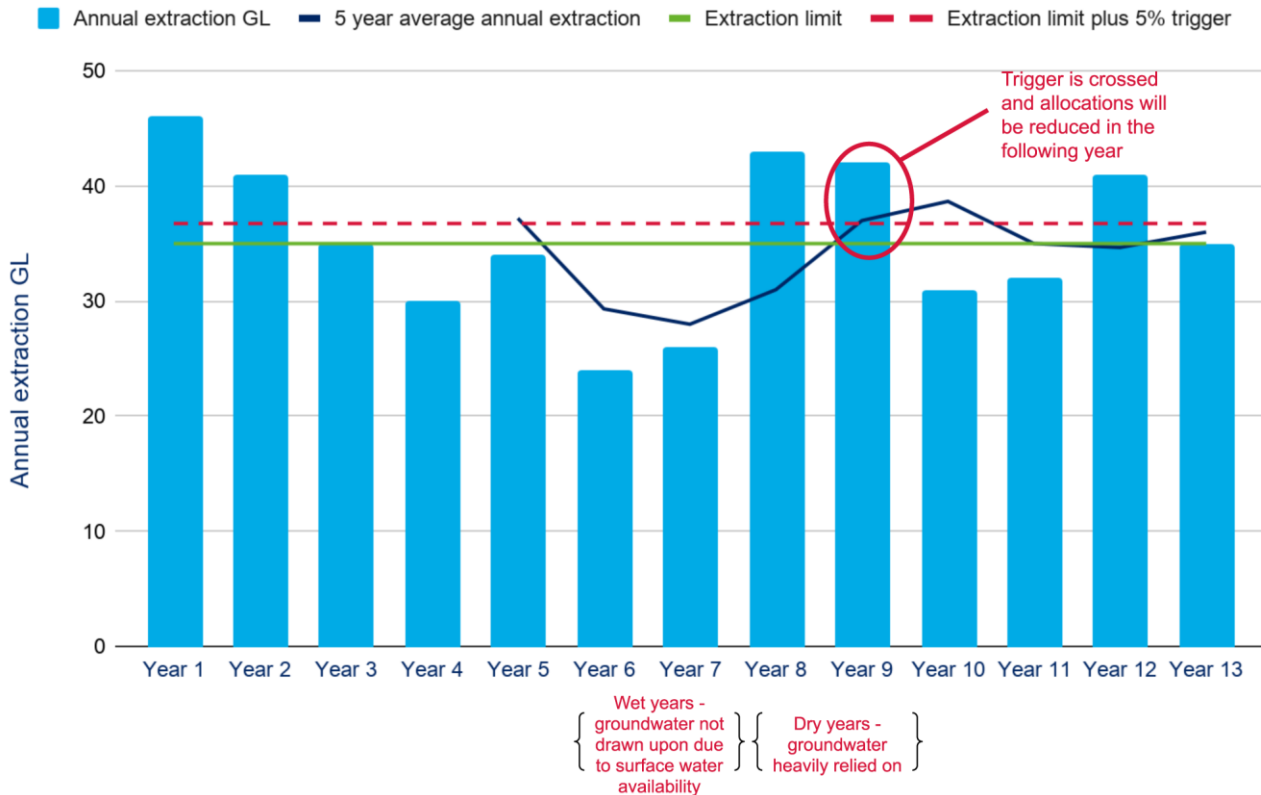


Figure 2. Five-year average annual extraction exceeds the long-term average annual extraction limit plus the compliance trigger, leading to reduced available water determinations.

Our assessment considers several other factors.

Account rules in water sharing plans vary. Some plans allow licence holders to carry over unused allocations for use in future years. They may also limit how much of the accrued water can be used from an account during a water year. In some groundwater sources, the number of shares in accounts exceeds the extraction limit. Where large account volumes have accrued, and extraction exceeds the compliance triggers, we may need to limit the volume of water that is added to accounts or that licence holders can access from their accounts for more than one year.

We consider current pumping patterns and account trading history in our assessment. For example, we assume inactive licences will remain inactive.

We consider the requirements for basic landholder rights. Reduced available water determinations will often only apply to lower priority licence categories.

Available water determination announcements

We announce available water determinations on our website at www.industry.nsw.gov.au/water/allocations-availability/allocations/determinations and share water allocations statements at www.industry.nsw.gov.au/water/allocations-availability/allocations/statements

You can also find available water determinations in the Available Water Determinations Register by clicking through to waterregister.watnsw.com.au/water-register-frame and searching by water source and access licence category.

After announcing an available water determination, we credit water allocation accounts as advised in the determination.

Groundwater allocations will not change after 1 July, except in the following circumstances. There may be an increase in allocation if the:

- 1 July announcement is less than a full entitlement (1 ML/share or 100%); or
- available water determination is linked to a regulated river allocation.

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