

## Water Sources

In order to determine how the share of water for the environment is calculated, in the state of New South Wales, Australia, a [water sharing plan](#) for a defined area sets out specific rules for sharing the water between the environment and other extractive water uses, such as irrigation, industry, stock and domestic users and town water supply.

The [Water Sharing Plan for the Lachlan Regulated River Water Source](#) sets out the provisions for environmental water in regulated sections of the Lachlan River.

### Lachlan Water Management Area

[The Plan area](#) applies to the regulated portions of the Lachlan River, including the Lachlan River from the upper reaches of Wyangala Dam to its junction with the Murrumbidgee River, a number of distributary creeks in the Condobolin area, including Bumbuggan Creek, parts of Goobang and Island Creeks and Willandra Creek from its offtake to Willandra Homestead Weir. It does not apply to the regulated portion of the Belubula River. The Plan also provides for replenishment flows to Booberoi, Merrowie, Torriganny, Muggabah and Merrimajeel Creeks and Willandra Creek downstream of Willandra Homestead.

### Lachlan Environmental Water Management

The management and administration of environmental water can be very complex. There can be several ways in which environmental water is calculated, accumulated and managed and the responsibility for advising on how the water is used can be vested in several different organisations. Sources of licenced water for environmental purposes in the Lachlan include Environmental Trust and RiverBank, held by the NSW Office of Environment and Heritage, and [Commonwealth Environmental Water](#), held by the Department of Sustainability, Environment, Water, Population and Communities (SEWPaC). Cultural water may also be available to indigenous groups throughout the Lachlan.

### Sources of Lachlan Environmental Water

Environmental water is generally referred to as one of two broad types: 'planned or rules-based' environmental water and 'licensed or held' environmental water.

### Lachlan Planned Environmental Water

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#### Translucent Account Water

The total volume of water available for translucent flows in the Lachlan ranges from **zero** up to a maximum of **350,000 megalitres** per year. The Water Sharing Plan sets out the rules

determining the availability and accounting for the translucent component of the environmental water. The water becomes available when there have been inflows totalling 250,000 megalitres or more into Wyangala Dam, commencing from January 1st each year. Once this threshold is reached, any flows into Wyangala Dam, between 15 May and 15 November each year, sufficient to produce a flow downstream of Lake Brewster of 3500–8000 ML/day, should be allowed to continue down the river, as would have occurred prior to the dam's construction. The translucent flow release window for Brewster is from 1 June to 30 November. The translucent flows are protected by prohibiting extraction or diversion of flows into the storages at Cargelligo and Brewster.

The rules for use of the translucent account have been established to achieve enhanced outcomes for wetland flooding, waterbird and native fish breeding. The hydrological and seasonal triggers established by the WSP ensure that the key ecological riverine and floodplain features of the Lachlan River are targeted during translucent releases. The implementation of the translucency rules requires the [documentation](#) of the benefits of translucent releases and to communicate those benefits to the general community.

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#### **Environmental Contingency Allowance**

The Water Sharing Plan makes 10,000 megalitres available to each of the two Environmental Contingency Allowances (ECA) accounts annually when the general security allocation exceeds 50% as at July 1. If not already credited on July 1st, the 10,000 ML will be credited to each of the two ECA accounts when the general security allocation reaches 75%.

The Water Sharing Plan further specifies that the Wyangala ECA and the Lake Brewster ECA may be released for ecological purposes including, but not limited to, completion of waterbird breeding events, promotion of fish breeding, promotion of fish passage, wetland watering and increasing flow variability. The Water Sharing Plan stipulates that the rules determining the volume and timing of releases of water credited to the Wyangala ECA and Lake Brewster ECA accounts shall be specified in accordance with procedures established by the Minister.

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#### **Water Quality Allowance**

The Water Sharing Plan makes 20,000 megalitres available for the Water Quality Allowance (WQA) on July 1st each year.

The WQA may be released for any water quality management purpose including, but not limited to, reduction of salinity levels, dilution of black water events and mitigation of blue-green algal blooms. The WSP stipulates that the rules determining the volume and timing of releases of water credited to the WQA account shall be specified in accordance with procedures

established by the Minister.

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## Lachlan Licensed Environmental Water

Combined holdings of e-water in the Lachlan Catchment represent ~17% of total licensed entitlement on the Lachlan Regulated River ([Lachlan Valley Water 2010](#)).

### Commonwealth Environmental Account Water

Up to **733 megalitres** of High Security entitlement and **86,923 megalitres** of General Security entitlement in the Lachlan is held and [managed by SEWPaC](#) (the Australian Government). The amount that becomes available each year for release is dependant on the water resource assessment. The volume of water held in the State Water-managed storages of Wyangala and Brewster is calculated and updated regularly and holders of shares and entitlement are then allocated a percentage of their entitlement, dependant on water availability. The amount made available can vary from **zero** up to the full amount of entitlement held.

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### NSW Environmental Water Holdings

NSW Office of Environment and Heritage, through the Environmental Trust and [RiverBank](#) hold **1000 megalitres** of high security and **24,569 megalitres** of general security licenced Environmental Water. The entitlement has been purchased for the Lachlan through the water buy-back scheme funded by the NSW Government. The amount available each year for release is dependant on the resource assessment – the volume of water held in the State Water-managed storages of Wyangala and Brewster is calculated and updated regularly and holders of shares and entitlement are then allocated a percentage of their entitlement, dependant on water availability. The amount made available can vary from **zero** up to the full amount of entitlement held.

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