

Public information sessions for the Towamba River water sharing plan

This document answers questions the public asked during information sessions for the draft *Water Sharing Plan for the Towamba River Unregulated and Alluvial Water Sources 2022*.

The NSW Department of Planning and Environment publicly exhibited the draft *Water Sharing Plan for the Towamba River Unregulated and Alluvial Water Sources 2022* from 9 May to 19 June 2022. We held 2 public information sessions to inform the public and get feedback on the draft water sharing plan. We also held an online webinar on 19 May 2022 and a face-to-face session in Towamba on 26 May 2022.

Flow gauges

What is the location of the Towamba River gauge (gauge number 220004)?

Towamba River gauge (gauge number 220004) is on the Towamba River near the boundary of the Lower Towamba River Water Source and Upper Towamba River Water Source. This is about 5 kilometres upstream of the bridge crossing at Towamba.

Towamba River gauge (gauge number 220004) is the flow reference point for Wog Wog River, Jingo Creek, Mataganah Creek, Myrtle Creek, Upper Towamba and Lower Towamba River water sources. There are no other gauges located in this extraction management unit (a group of water sources that is managed as one), and as these water sources are connected, it is appropriate to use the Towamba River gauge as their flow reference point. The use of a gauge located downstream helps us to manage the combined effects of extraction on downstream areas.

How old is the Towamba River gauge (gauge number 220004)?

The Towamba gauge 220004 was installed in April 1970 at the same location it is in today.

WaterNSW visits the site around every 8 weeks to check performance and to take a flow measurement. WaterNSW calibrates the level sensor on the gauge using an externally certified calibrated instrument.

The flow is calculated from a relationship between the level and the flow measurements – also known as the rating curve. The adjustment of the rating curve is dependent on the site characteristics. The rating curve is adjusted if irregularities or trends are found, or if there are known changes to the site or if flow measurements are 10% different from the expected flow height and volume relationship.

WaterNSW makes more visits when it can, and if resourcing and time allows, when river flow begins to drop to a level (known as the cease-to-pump trigger) where licensed users must stop pumping water.

Where can we see the historical flow data?

You can download historical flow data from the [WaterNSW Real-time Data website](#).

To find flow data that is measured at the gauges, search for the gauge number under 'Rivers and Streams'. You can download the entire period of record or a selected period into a spreadsheet from this website.

Gauges within the Towamba River unregulated and alluvial water sharing plan area are the:

- Towamba River gauge (gauge number 220004)
- Pambula River at Lochiel gauge (gauge number 220003).

If water access licence holders do not have access to the internet, how can they find out what the river flow is?

Licence holders can call the WaterNSW customer help desk and ask for the flow at a particular gauge. The help desk staff will use the Real-time Data website to see what the flow is for the relevant gauge.

Call the help desk on 1300 662 077.

If sediment enters the river, does this affect river flow? Is it considered?

If sediment enters the river and settles on the riverbed, it may change the river morphology (shape of the river channel). This is a natural process which causes changes to a river's shape over time.

WaterNSW maintains the flow gauges. It will take into account any change of the river morphology at the gauge to make sure the gauge is accurately recording flow.

Can you see the effect of the cease-to-pump access rule in river flow data?

Figure 1 shows river flow measured at the Towamba River flow gauge (gauge number 220004) and rainfall measured at Green Cape weather station (station ID number 069137).

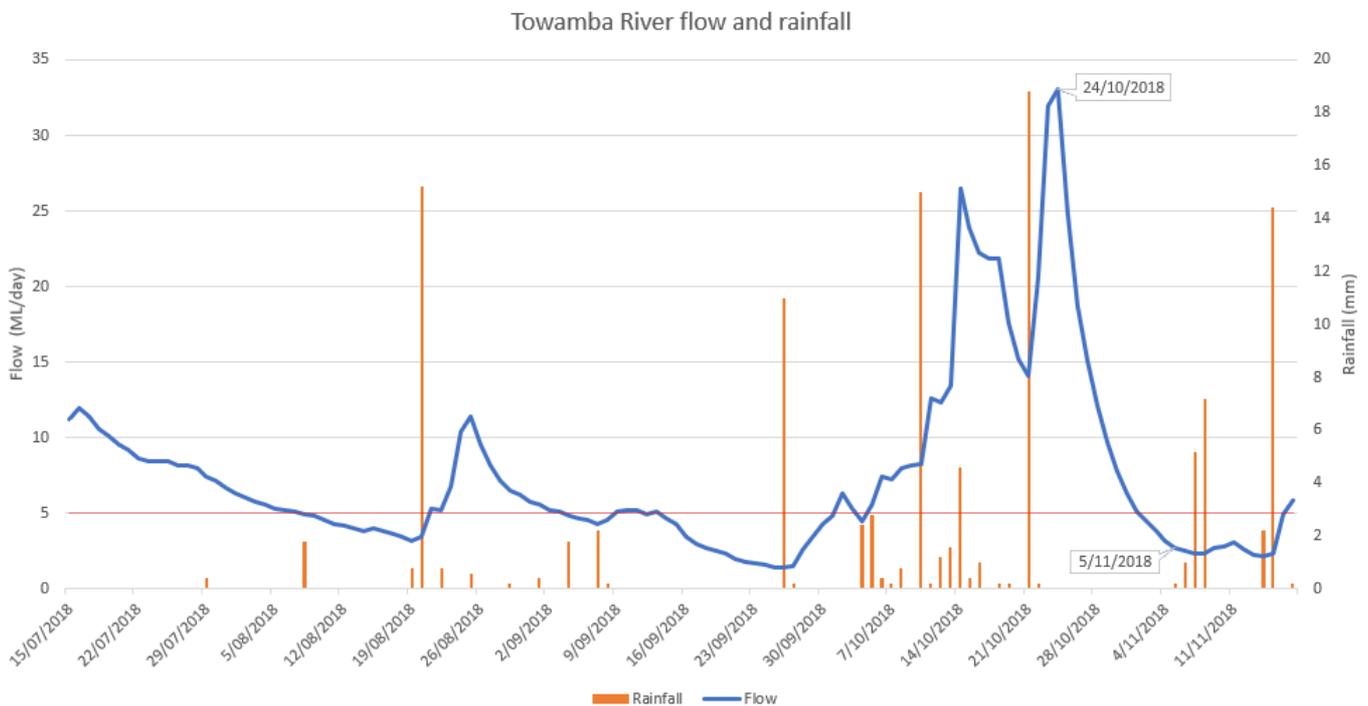


Figure 1. Towamba River flow and rainfall

The period used for this chart is from 15 July to 17 November 2018. We selected this period as it shows flows reaching 5 ML/day on multiple occasions.

Between 24 October and 5 November, river flow declines from 33 ML/day to 2.7 ML/day. When the river flow reaches 5 ML/day, the rate of decline slows slightly. This may be a result of the cease-to-pump rule, although this is hard to prove as there is little to no metering data in the Towamba River area. Without metering data, it is difficult to confirm if licensed users have complied with the cease-to-pump rule and how much water has been taken from the river.

You can find the data we used to create this chart on the [WaterNSW Real-time Data website](#) and the [Bureau of Meteorology website](#).

What percentage of time would a cease-to-pump rule apply under the current plan rules, and under the proposed plan rules?

Table 1 shows an analysis of cease-to-pump days (days when river flow drops to a level where licensed users must stop pumping water) using flow data from 2010 to 2021. We got the data for this analysis from the [WaterNSW Real-time Data website](#).

Table 1. Comparing days under cease-to-pump conditions for current and proposed rules

Water source	2010 plan rules	Proposed rules	Days of cease-to-pump under 2010 plan rules	Days of cease-to-pump under proposed rules
<ul style="list-style-type: none"> Wog Wog River Jingo Creek Mataganah Creek Myrtle Creek Upper Towamba Lower Towamba River water sources 	Measured at 220004 Towamba River gauge: <ul style="list-style-type: none"> Cease pumping at 5 ML/day Commence pumping at 15 ML/day 	Measured at 220004 Towamba River gauge: <ul style="list-style-type: none"> Cease pumping at 6.5 ML/day Commence pumping at 34 ML/day 	Out of 4,221 days from 2010 to 2021: <ul style="list-style-type: none"> 466 days in total (11% of the time) Number of cease-to-pump events: 14 Maximum length of a cease-to-pump event: 160 days (during the 2019–2020 drought). Cease-to-pump events happened mostly in spring.	Out of 4,221 days from 2010 to 2021: <ul style="list-style-type: none"> 658 days in total (16% of the time) Number of cease-to-pump events: 17 Maximum length of a cease-to-pump event: 189 days (during the 2019–2020 drought). Cease-to-pump events happened mostly in spring.
Pambula Lake Tributaries Water Source	<ul style="list-style-type: none"> Cease pumping when there is no visible flow at the take site. 	<ul style="list-style-type: none"> Cease pumping at 0.5 ML/day Commence pumping at 3.4 ML/day, measured at 220003 Pambula River at Lochiel gauge 	Out of 4,221 days from 2010 to 2021: <ul style="list-style-type: none"> 628 days in total (15% of the time) Number of cease-to-pump events: 20 Maximum length of a cease-to-pump event: 173 days (during the 2019–2020 drought). Cease-to-pump events happened mostly in January.	Out of 4,221 days from 2010 to 2021: <ul style="list-style-type: none"> 896 days in total (22% of the time) Number of cease-to-pump events: 18 Maximum length of a cease-to-pump event: 211 days (during the 2019–2020 drought). Cease-to-pump events happened mostly in January.

The [Background Document to the Draft Water Sharing Plan for the Towamba River Unregulated and Alluvial Water Sources 2022](#) gives more information.

Basic landholder rights

What are the water rights for people with river frontage or a bore? Are there restrictions on this type of extraction?

A landholder has basic landholder rights to take water from a river, lake, aquifer or rainfall run-off without a licence or approval in certain circumstances.

There are 3 types of basic landholder rights:

- domestic and stock rights
- harvestable rights
- native title rights.

Table 2 describes these basic landholder rights. The rules in the water sharing plan for access (cease-to-pump rules), trade, available water determination and water allocation accounts do not apply to this form of water extraction.

Table 2. Types of basic landholder rights

Basic landholder right	Details
<p>Domestic and stock rights</p>	<p>Landholders (owners or occupiers of land) who have land that has:</p> <ul style="list-style-type: none"> • a river, lake, or estuary frontage, or • is overlaying an aquifer <p>can take and use water for domestic consumption and stock watering without a licence, water supply work approval (unless the work is a dam or bore), or water use approval.</p> <p>Domestic consumption means the use of water for normal household purposes in domestic premises, such as washing clothes or watering gardens around the house.</p> <p>Stock watering means the watering of stock animals being raised on the land. It does not include raising stock animals on an intensive commercial basis where the animals are housed or kept in feedlots or buildings, or for irrigating pasture to feed stock.</p> <p>Water taken for purposes other than domestic consumption and stock watering is not allowed under this type of basic landholder right.</p> <p>To read more about domestic and stock rights, visit https://water.dpie.nsw.gov.au/licensing-and-trade/basic-landholder-rights/domestic-and-stock-rights</p>

Basic landholder right	Details
<p>Harvestable rights</p>	<p>Landholders (owners or occupiers of land) can capture and store a proportion of the rainfall run-off from their landholding in one or more harvestable rights dams. They can do this without a water access licence, water supply work approval, or water use approval.</p> <p>Restrictions on the size and location of the dams apply. Some restrictions also apply to the purpose for which landholders use the water in these dams. The water captured in a harvestable rights dam cannot be supplied to any other property.</p> <p>In coastal-draining catchments, landholders can capture up to 30% of the average annual regional rainfall run-off and use it for domestic consumption, stock watering and extensive agriculture.</p> <p>To read more about harvestable rights, visit https://water.dpie.nsw.gov.au/licensing-and-trade/basic-landholder-rights/harvestable-rights</p>
<p>Native title rights</p>	<p>Anyone who holds native title for water, as determined under the Commonwealth <i>Native Title Act 1993</i>, can take and use water in the exercise of their native title rights. They can do this without a water licence, water supply work approval (unless the work is a dam or bore), or water use approval.</p> <p>To read more about native title rights, visit https://water.dpie.nsw.gov.au/licensing-and-trade/basic-landholder-rights/native-title</p>

Mapping

The headwater of New Station Creek is included in Mataganah Creek Water Source. Is this correct?

This question helped us identify a mistake in the plan map. We will change the boundary on the map between Upper Towamba River Water Source and Mataganah Creek Water Source to correct this. We will make sure that New Station Creek and its tributaries are within the Upper Towamba River Water Source on the new map.

Trade

What is trade?

Water trading is the process of buying and selling water access entitlements or allocations. Water access entitlements and allocations (the volume of water the licence holder can take) are expressed as unit shares on a water access licence. Trading can be either temporary or permanent.

Temporary trade is the transfer of a water allocation from one legal entity to another for the remainder of the water year, or for a specified time. For example, a licence holder can sell some or

all of their water allocation, usually in a unit of ML/yr, to be used before the end of the financial year (also known as the 'water year'). At the start of the next water year, the licence holder will be granted new allocation, which they can use or sell.

Permanent trade is the transfer of a water entitlement (also known as a share component) from one legal entity to another permanently. For example, a licence holder can sell their entitlement permanently, and once they do, they can no longer extract water under that entitlement. Water sharing plans define where water can be traded.

More information

To read the draft *Water Sharing Plan for the Towamba River Unregulated and Alluvial Water Sources 2022* and related fact sheets, visit <https://www.industry.nsw.gov.au/water/plans-programs/water-sharing-plans/recently-on-public-exhibition/towamba-river>