

## Proposed changes

*Following is a summary of the proposed changes that have been included in the draft Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2020.*

Water sharing plans in NSW are the primary legal framework for managing water access and sharing in NSW. The plans are valid for 10 years from their commencing date.

Near the end of the 10-year term, the Natural Resource Commission (NRC) conducts a formal review to identify any necessary changes to deliver better outcomes for all water users, including the environment.

Under the *Water Management Act 2000*, the Minister may, on the recommendation of the NRC, extend a water sharing plan for another 10 years or replace it with a changed plan.

The NRC completed its review of the Bellinger River plan in 2018 and recommended its replacement. This replacement is due by 1 July 2020. A copy of the NRC report is available from the NRC website at [www.nrc.nsw.gov.au/publications](http://www.nrc.nsw.gov.au/publications)

This factsheet provides a summary of the proposed changes. The proposed changes to the plan range from administrative amendments to varied and additional rules.

## Scope of the water sharing plan

A new water sharing plan, called the 'Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2020' has been drafted. When finalised, this plan will replace the *Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008*.

## Bellinger River Coastal Floodplain Alluvial Water Source

To manage the take of water from the water source under the *Water Management Act 2000*, a water source must be included in a water sharing plan. The proposed replacement plan for the Bellinger River includes a new water source—the Bellinger River Coastal Floodplain Alluvial Water Source.

This new water source includes the alluvial groundwater downstream of the tidal limit within the water sharing plan boundary. A long term average annual extraction limit of 350 megalitres is proposed. Current licence volumes under *Water Act 1912* licences are 131 megalitres per year. These will be converted to licence shares under the *Water Management Act 2000*. Additional licence shares may be granted through a controlled allocation process. Trading into the water source is not permitted. Trading within the water source is permitted, subject to assessment.

## Objectives, strategies and performance indicators

The plan includes updated objectives, strategies and performance indicators to enable the monitoring and review of the performance of the plan. The proposed objectives, strategies and performance indicators of the plan deal with matters similar to the current plan, but have been changed to reflect a stronger logical connection to the rules of the plan. There is also a clear distinction between the environmental, economic, social and Aboriginal cultural objectives.

## Water supply works approvals

Since the commencement of the original water sharing plan, new information has been identified including:

- The Bellinger River area has had coastal wetlands listed under the State Environmental Planning Policy (Coastal Management) 2018. These include the Urunga Wetlands, which are located within the Coastal Bellinger Water Source, the Coastal Kalang Water Source and the Bellinger Coastal Floodplain Alluvial Water Source.
- In-river dams affect instream values such as the ecology and water quality. We have identified four water sources with high instream values due to their ecology and location in Gondwana Rainforest of Australia. These are the Thora-North Arm Bellinger River Water Source, Rosewood Creek Water Source, Never Never Creek Water Source and Kalang River Water Source.
- We identified two additional water sources as being at high risk from in-river dams due to existing pressures from extraction. These are the Spicketts Creek Water Source and Dalhousie Creek Water Source.

As a result, the following changes to rules that apply to water supply works approvals are proposed in the replacement water sharing plan:

- prohibiting construction of in-river dams on third-order streams or higher in the Thora-North Arm Bellinger River, Rosewood Creek, Never Never Creek and Kalang River Water Sources
- prohibiting construction of in-river dams on all order streams in the Spicketts Creek and Dalhousie Creek water sources, and
- prohibiting works near coastal wetlands if there will be more than minimal harm to a coastal wetland in the Coastal Bellinger the Coastal Kalang , and the Bellinger Coastal Floodplain Alluvial water sources.

## Additions to groundwater-dependent ecosystems schedule

Recent work by the NSW Department of Planning, Industry and Environment has identified additional potential high-priority groundwater-dependent ecosystems. We propose to add these groundwater-dependent ecosystems to the High Priority Groundwater-Dependent Ecosystem Map in the replacement plan. These ecosystems are referred to as groundwater-dependent vegetation ecosystems and are located in the following six water sources:

- Thora-North Arm Bellinger Water Source
- Spicketts Creek Water Source
- Rosewood Creek Water Source
- Never Never Creek Water Source
- Coastal Bellinger Water Source
- Coastal Kalang Water Source.

These ecosystems are generally located within national parks and other public lands. The replacement plan includes rules that restrict or prohibit new water supply works (bores) within specified distances of the groundwater dependent ecosystems.

## Access and trade rules

The NRC recommended changing flow reference gauges to telemetered gauges to improve compliance and enforcement of the rules. Several changes to access rules are proposed that arise from the inclusion of new river flow gauges and updated flow data.

We have updated flow classes and cease-to-take rules in a number of water sources with the additional flow data. Access rules in a number of water sources are now referenced to the new gauges. These rules have also been updated with the flow data obtained from the new gauges.

We also completed a risk assessment to identify particularly sensitive water sources that are at high risk from extraction. This finding has led to changes to trade rules in two coastal water sources. We updated hydrologic flow studies to model flows in each water source.

Proposed changes to access and trade rules include:

- updating the location of flow reference points to telemetered flow gauge sites
- applying daily flow rate values at these updated sites for very low flows, A class and B class flows for most water sources. These are reflected in changes to the cease-to-pump levels
- allowing trade into the tidal pool management zones of the Coastal Kalang Water Source and the Coastal Bellinger River Water Source
- prohibiting trade into Spicketts Creek and Dalhousie Creek water sources due to the high risk of extraction during periods of low flow
- prohibiting take by licence holder for the first 24 hours after flows exceed very low flows in water sources with telemetered gauges. This helps to get the streams flowing again after dry periods.

**Table 1** and **Table 2** list specific changes proposed to the flow reference points (flow gauges) and cease-to-pump rules (very low flow class) for each of the water sources in the Bellinger River plan area.

## Distance rules relating to the location of groundwater bores in alluvial aquifers

The draft plan proposes new rules that govern the minimum distance that groundwater bores may be located from areas of acid sulphate soils. The plan proposes that water supply works must not be granted or amended within an area classed as having a high probability of the occurrence of acid sulphate soils, based on the Acid Sulphate Soil Risk Map maintained by the department.

Similarly, there are proposed new rules governing the minimum distance that groundwater bores can be located from contamination sites. New or amended water supply works will not be granted:

- within 500 metres of a contamination site identified by the plan
- within 250 metres from the edge of a contamination plume and an onsite sewage system
- between 250 and 500 metres of the edge of a contamination plume where drawdown will occur within 250 metres of the edge of the contamination plume.

The draft plan also proposes new rules regarding the minimum distance that a groundwater bore can be located from a groundwater-dependent culturally significant site. These are 100m from a groundwater-dependent culturally significant site if the bore is for basic landholder rights, and 200m for all other bores.

## Planned environmental water in relation to alluvial aquifers

We propose to change the way planned environmental water is specified in the water sharing plan. We will define it more accurately, including removing the reference to recharge. This proposal will not alter the actual volume of planned environmental water or the timing of its availability to the environment.

More information on this proposal is provided in the fact sheet 'Specifying planned environmental water in groundwater plans', available from [industry.nsw.gov.au/water-resource-plans/general-resources](https://www.industry.nsw.gov.au/water-resource-plans/general-resources)

## Estimated water requirements for basic landholder rights and licensed take

We propose to update the estimated water requirements of basic landholder rights. We will also update the total volumes or unit shares specified in the share components of all access licences to reflect the current information.

## More information

The draft Bellinger River Area water sharing plan and other fact sheets are available from <https://www.industry.nsw.gov.au/water>.

# Bellinger River area water sharing plan

## Fact sheet



*'Real time' flow data for each flow gauge is available on the WaterNSW website at [www.waternsw.com.au/waterinsights/real-time-data](http://www.waternsw.com.au/waterinsights/real-time-data). Enter the gauge number in the 'find a site' box to access current flows in megalitres or river height.*

## Trade and access rules

**Table 1. Proposed changes to access rules for the Bellinger River Area Unregulated and Alluvial Water Sources\***

Water source	Current flow reference point	Current very low flow class	Proposed flow reference point	Proposed very low flow class
Coastal Kalang (tidal)	20501008 Kalang River at Sunny Corner (staff gauge)	Flow ≤ 4 ML/d (98 <sup>th</sup> percentile)	205016 Bellinger River at Fosters	Flow ≤ 43 ML/d (98 <sup>th</sup> percentile)
Kalang River (tidal & non tidal)	20501008 Kalang River at Sunny Corner (staff gauge)	Flow ≤ 4 ML/d (98 <sup>th</sup> percentile)	205016 Bellinger River at Fosters	Flow ≤ 43 ML/d (98 <sup>th</sup> percentile)
Hydes Creek (tidal & non tidal)	20501005 Hydes Creek at Kethels Road (staff gauge)	Flow ≤ 1 ML/d (95 <sup>th</sup> percentile)	205016 Bellinger River at Fosters	Flow ≤ 56 ML/d (95 <sup>th</sup> percentile)
Bellinger River	205002 Bellinger River at Thora	Flows ≤ 16 ML/d (95 <sup>th</sup> percentile)	205016 Bellinger River at Fosters	Flows ≤ 56 ML/d (95 <sup>th</sup> percentile)
Boggy Creek	205002 Bellinger River at Thora	Flows ≤ 16 ML/d (95 <sup>th</sup> percentile)	205016 Bellinger River at Fosters	Flows ≤ 56 ML/d (95 <sup>th</sup> percentile)
Coastal Bellinger (tidal)	205002 Bellinger River at Thora	Flows ≤ 16 ML/d (95 <sup>th</sup> percentile)	205016 Bellinger River at Fosters	Flows ≤ 56 ML/d (95 <sup>th</sup> percentile)
Rosewood Creek	205002 Bellinger River at Thora	Flows ≤ 16 ML/d (95 <sup>th</sup> percentile)	205019 Never Never Creek at Old Road	Flows ≤ 4 ML/d (90 <sup>th</sup> percentile)
Never Never Creek	Point of take	Visible flow at point of take	205019 Never Never Creek at Old Road	Flows ≤ 4 ML/d (90 <sup>th</sup> percentile)
Thora North Arm Bellinger River	205002 Bellinger River at Thora	Flows ≤ 16 ML/d (95 <sup>th</sup> percentile)	205002 Bellinger River at Thora	Flows ≤ 20 ML/d (95 <sup>th</sup> percentile)

\*Flow reference points and cease to take rules (very low flow class) for each water source

**Table 2. Bellinger River Area Unregulated and Alluvial Water Sources\***

<b>Water source</b>	<b>Current cease to take and flow reference point</b>
Dalhousie Creek	No visible flow immediately downstream of take site or into and out of the pumping pool.
Spicketts Creek	No visible flow immediately downstream of take site or into and out of the pumping pool.
Bellinger River Coastal Floodplain	No cease to take.

\*current cease to take and flow reference points for water sources not using a gauge.

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