

## Report card for Coastal Kalang Water Source

### Background

Water source context		River flows
72.82 km <sup>2</sup>	<b>Low flow index*</b>	122 ML/day (80 <sup>th</sup> percentile of November [critical month] days).*
Kalang River	<b>Flow records</b>	13 years—Bellinger River at Fosters Gauge (205016).
Coastal Bellinger	<b>Stream type</b>	Estuary
*80% of the time average daily flow exceeds 122 ML/day in the critical month of November and this represents low flows.		
Catchment boundary definition		
Coastal Kalang Water Source is located in the Bellinger River Catchment, and comprises the hydrological catchment of Kalang River downstream of the tidal limit of Kalang River. The water source intersects Tarkeeth State Forest, Jaaningga Nature Reserve, and Newry State Forest.		
Upriver alluvial aquifer description		
The upriver alluvial aquifer consists of medium to coarse-grained sand, silts and gravel deposits. Groundwater from the aquifer is typically highly connected to the surface water. As a result of this connection, coupled with the coarser sediments, water quality is typically good with high yields potentially obtainable in some areas.		
<b>Groundwater Dependent Ecosystems</b>	Groundwater-dependent vegetation ecosystem present.	
Licensed water entitlement		
<b>Total surface water entitlement</b>	77 ML/year.	
<b>Licences</b>	5 licences to access surface water.	
<b>Proportion of extraction management unit</b>	2% of the Bellinger River Catchment Extraction Management Unit.	
<b>Total groundwater entitlement</b>	Nil.	
<b>Licences</b>	N/A	
Note: Estimated at January 2020		
Existing access arrangements during dry conditions		
<b>Cease to take</b>	4 ML/day (98 <sup>th</sup> percentile).	
<b>Pumping restrictions</b>	8 hours/day at 7 ML/day (80 <sup>th</sup> percentile).	
<b>Reference point</b>	Sunny Corner Road Crossing (staff gauge).	

## Proposed recommendations

<b>Draft access rules for surface water</b>		
<b>Rules</b>	<b>Tidal Management Zone</b>	<b>Non-tidal Management Zone</b>
<b>Cease to take</b>	Less than or equal to 43 ML/day (estimated 98 <sup>th</sup> percentile critical month), or when there is no visible flow at the location of take.	When there is no visible flow at the take site, or when there is no visible flow at the location of take.
<b>Commence to take</b>	24 hours after flows have returned above 43 ML/day.	N/A.
<b>Reference point</b>	Bellinger River at Fosters Gauge (205016).	At the location of take.
<b>Draft access rules for groundwater</b>		
<b>Cease to take</b>	Surface water cease-to-take rule applies.	
<b>Commence to take</b>	Surface water commence-to-take rule applies.	
<b>Exemptions</b>	Rule does not apply to licensed domestic and stock and town, local water utilities, pumping related to specific food or animal safety/care or extraction from take pool in accordance with conditions of approval.	
<b>Draft distance rules for groundwater</b>		
<b>Distance rules</b>	<p>A standard suite of rules have been adopted for the upriver alluvials.</p> <p>Distance criteria will apply to new and replacement bores (not current) in relation to:</p> <ul style="list-style-type: none"> <li>• minimising interference between bores</li> <li>• protecting groundwater dependent culturally significant sites</li> <li>• contaminated sites</li> <li>• acid sulphate soils</li> <li>• basic landholder rights</li> <li>• protecting groundwater dependent sensitive environmental areas.</li> </ul>	
<b>Exemptions</b>	Exemptions to these rules (e.g. for replacement works) apply in specific circumstances.	

Draft licence dealing rules		
Rules	Trade	
	Tidal Management Zone	Non-tidal Management Zone
<b>INTO water source</b>	Permitted to a maximum additional entitlement of 88 ML for the entire water source.	Permitted to a maximum additional entitlement of 88 ML for the entire water source.
<b>WITHIN water source</b>	Permitted, subject to assessment.	Permitted, subject to assessment.
Rules	Conversion	
<b>Surface to ground</b>	Permitted.	
<b>Ground to surface</b>	Not permitted.	
<b>High flows</b>	Permitted.	
Draft rules for granting access licences/works approvals		
<b>Aboriginal cultural access licence</b>	Permitted, no greater than 10ML/yr. per application and subject to assessment.	
<b>Aboriginal community development access licences</b>	Permitted, subject to assessment.	
<b>Coastal wetlands</b>	Not permitted where there is more than minimal harm to Coastal Wetlands mapped under the <i>State Environmental Planning Policy (Coastal Management) 2018</i> .	
<b>In-river dams</b>	Permitted, subject to assessment.	
<b>Permitted.</b>		
<b>Alluvial bore</b>	Permitted, subject to assessment and distance rules.	

## Key factors for decisions

- Medium instream value, low hydrologic stress, low risk to instream value and medium economic dependence.
- Commence to take rule adopted to promote instream value after very low flows have occurred.
- Recommend trades into the tidal pool area up to a limit are allowed due to the low hydrologic stress and low sensitivity of the estuary to inflows (low flows).
- High flow licence conversion applications accepted due to the use of a telemetered flow reference point.
- Coastal wetlands listed under the *State Environmental Planning Policy (Coastal Management) 2018* are located in the water source.
- Applications for Aboriginal community development licenses accepted for consideration.

## Public exhibition

Feedback is particularly sought on the suitability of the proposed access and trading rules.

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

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