

Report card for the Malpas Dam Water Source

Water source context		River flows	
Area	19,662 hectares (3% forested)	Low flow index* (for December)	80th%ile = 1 ML/day (Source. Gara River Gauge at Willow Glen)
Average annual rainfall	931mm	Flow records	15 years of data (1997 to 2012) from Gara River gauge @ Willow Glen. 5 years of data from Gara River gauge @ Malpas Dam Storage. 14 years of data from Urandangie Creek gauge @ Urandangie.
Inflowing water source	None	Stream type	Gaining.
Receiving water source	Gara River	* 80 per cent of the time average daily flow exceeds 1 ML/day and this represents low flows.	

Background Information		
Water Source Attributes	Rating	Justification
Relative Instream Value (within catchment)	LOW	- 3 threatened frog species.
Hydrologic Stress	HIGH	- within water source = high.
Relative Economic Significance of Irrigation (within catchment)	LOW	- low economic dependence of the local community on water extracted for irrigation. - medium value of production from irrigation.
Risk to Instream Value (from extraction)	HIGH	- instream values are at high risk of being impacted by extractions within the water source.
Licensed water entitlement		
Total surface water entitlement	7,649.5 ML/year.	
Licensed purpose	99% used for town water supply, 1% used for irrigation purposes.	
Proportion of extraction management unit	34% of total Extraction Management Unit entitlement.	
These figures and estimates were made in September 2012.		

Existing access arrangements during dry conditions	
Pumping restrictions	No existing access arrangements.
Cease to pump	No existing cease to pump.
Reference point	No existing reference point.
Water user association	None.

Recommendations

Draft access rules for surface waters	
Cease to pump	<p>Pumping is not permitted from natural pools when the water level in the pool is lower than its full capacity.</p> <p>Note: 'Full capacity' can be approximated by the pool water level at the point where there is no visible flow into and out of that pool.</p> <p>Note: Natural pools include in-river pools found within the channels of rivers and creeks and off-river pools located on flood runners, floodplains and effluents e.g. lakes, lagoons and billabongs.</p> <p>Note: For the minority of pump sites not within a natural pool, these licences will be required to cease to pump when there is no visible flow at that pump site.</p>
Reference point	Individual natural pool.
<p>Note: Existing <i>Water Act 1912</i> licence conditions that are more stringent than these access rules will be carried forward.</p> <p>Note: These access rules do not apply to:</p> <ul style="list-style-type: none"> - Local water utility access licences - Town water supply access licences - Stock and domestic licences for the first three years of the plan (provided that extraction for stock purposes does not exceed 14 litres per hectare of grazeable area per day) - Water taken from existing dams. Any existing licence conditions associated with a dam will be carried over when the licence is converted under the Water Management Act 2000. 	

Malpas Dam release rules	
Releases From Malpas Dam	<p>Malpas Dam captures the majority of inflows from the Gara River and Urandangie Creek and dam releases have a substantial bearing on downstream users, environmental values and water sources.</p> <p>The following bypass rules are proposed for Malpas Dam:</p> <ul style="list-style-type: none"> • if inflows* to the dam are less than 1ML/day then outflows are equal to or greater than inflows. • if inflows* to the dam are greater than 1ML/day and less than 6ML/day then outflows are equal to or greater than 1 ML/day. • if inflows* to the dam are greater than 6ML/day then outflows are equal to or greater than 3 ML/day. <p>(*using the Gara River @ Willow Glen, Gauge)</p> <p>It is also proposed that an amendment provision be included in the plan that allows:</p> <ul style="list-style-type: none"> • for additional downstream releases after year 5 of the plan, where investigations demonstrate significant social, economic and environmental benefits and minimal impact on town water supply security. <p>Note. Such an amendment would require consideration by the Interagency Regional Panel and consultation with Armidale Dumaresq Council and other interested stakeholders.</p>

Draft trading rules	
INTO water source	Permitted, only if the total licensed entitlement in the water source does not increase (no net gain) from, Apsley Gorge, Apsley River, Bakers Creek, Blue Mountain Creek, Chandler Gorge, Chandler River, Christmas Creek, Coastal Macleay, Collombatti Creek, Commissioners Waters, Dungay Creek, Dyke Creek, Euroka Creek, Five Day Creek, Gara River, Georges River, Gills Bridge Creek, Green Gully, Hickeys Creek, Kunderang Creek, Macleay Gorges, Macleay Valley, Mungay Creek, Nulla Nulla Creek, Oaky River, Salisbury Waters, Stockyard Creek, Styx River, Tia River, Toorumbie Creek, Warbro Creek, Yarrowitch River.
WITHIN water source	Permitted, subject to assessment.
Draft rules for granting access licences	
In-river dams	Permitted, subject to assessment. Note: Dams require a licence if they are located on a permanent (spring fed) first or second order stream, a third order (or greater) stream, or if they exceed the maximum harvestable right dam capacity for the property.
Aboriginal community development	Not permitted as the water source experiences high flow stress due to the presence of the Malpas Dam Town Water Supply.
Conversion to high flows	Not permitted as the water source experiences high flow stress due to the presence of the Malpas Dam Town Water Supply.
Conversion to alluvial aquifer access licence	N/A.

Key factors for Panel decisions

- Low instream value, high hydrologic stress, high risk to instream value and low economic dependence.
- The high hydrologic stress in this water source is primarily due to extractions from the Malpas Dam (town water supply).
- Malpas Dam is located at the downstream end of the water source and bypasses approximately 0.2 ML/day. It is recommended to include a requirement for greater flow translucency from Malpas Dam to provide additional and varied flows for downstream users and assets.

Public exhibition

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

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