

# Report Card for Muswellbrook Water Source FOR PUBLIC EXHIBITION

Water Source Context	River Flows
<p><b>Area:</b> 755.9 km<sup>2</sup> (11% forested)  <b>Average Annual Rainfall</b> 665 mm  <b>Inflowing water source:</b> Nil  <b>Receiving water source:</b> Hunter River Regulated System, Hunter River Tidal Pool</p>	<p><b>Low flow Index:</b> (80<sup>th</sup>ile in December of days with flow) = 1 ML/day  <b>Flow records:</b> No gauge exists in this catchment. An estimate of the 80<sup>th</sup>ile of all days with flow was used. The estimate of 1 ML/day was based on adjacent gauges.</p>

Licensed Water use
<ul style="list-style-type: none"> <li>• <b>Total surface water entitlement: 598 ML/year</b> (88% used for irrigation purposes, 1% used for industrial purposes)</li> <li>• <b>44 surface water licenses - Peak Daily Demand=8.1 ML/day</b></li> <li>• <b>0.32 % of total Hunter Extraction Management Unit entitlement</b></li> </ul>

## Background information

Water Source attributes	Rating	Justification
Relative Instream Value (within catchment)	Low	<ul style="list-style-type: none"> <li>• 1 threatened bird species</li> <li>• platypus have been identified in this water source</li> <li>• 1 endangered ecological community</li> <li>• moderate fish community integrity</li> <li>• the ecology value of the river for invertebrates is deemed to be moderate</li> </ul>
Hydrological Stress	High	<ul style="list-style-type: none"> <li>• peak extraction demand exceeds available flows in December</li> </ul>
Relative Economic Significance of Irrigation (within catchment)	Low	<ul style="list-style-type: none"> <li>• low economic dependence of the local community on water extracted for irrigation</li> </ul>
Risk to Instream Value (from extraction)	Low	<ul style="list-style-type: none"> <li>• instream values are at low risk of being impacted by extractions within the water source</li> </ul>

## Existing Access Arrangements During Dry Conditions

Water User Association (WUA)	yes - Sandy Creek WUA
Licensed Cease to Pump (CtP)	some licences with visible flow and high flow conditions

## Proposed Recommendations for Muswellbrook Water Source

Draft Access Rules	
<b>Cease to Pump (CtP)</b>	No new cease to pump rules apply for the first five years of the plan. However, existing licence conditions will still apply. From year six of the plan, cease to pump is when there is either no visible inflow to, or outflow from, the pumping pool. For those licences on Sandy Creek with existing licence conditions relating to Rouchel Lane, these will be maintained. For those licences located in the alluvial areas downstream of Wells Gully road bridge these will be identified as part of the relevant Hunter Regulated River Alluvial water source.
<b>Reference Point</b>	Riffles upstream and downstream of the pump

Draft Trading Rules	
<b>INTO water source</b>	No trading into or out of the water source. The plan allows for amendment for the staged introduction of no net transfers as management systems become available.
<b>WITHIN water source</b>	No transfers between tributaries within the water source.
<b>Conversion to High Flow Access Licence</b>	Not permitted.
<b>Conversion to Aquifer Access Licence</b>	Not permitted

## Key Factors for Panel Decision

### Classification

- Losing stream type
- Low instream value, high hydrological stress, low risk to instream value, low economic dependence.

### Rules

- Staged introduction of the trading rules identified through classification process.
- Access rules identified through the classification process (no pumping from pools where there is no visible inflow and outflow; cease to pump to maintain a visible flow at specific site; specific flow rule for instream values) were not adopted by the Regional Panel, except in some sections of streams where such a condition already exists (eg. Sandy Creek). For others a visible inflow / outflow rule applies from year six. Due to the large number of small streams and lack of flow gauging stations the maintenance of a visible flow at a specific site is considered to be unviable.

## Matters raised during targeted consultation

- Based on submissions received from water users the Regional Panel has proposed amendment to the proposed access rules for the Muswellbrook water source. These have included the removal of the application of the Rouchel Lane access conditions to all access licences on Sandy Creek. These conditions will remain for those licences which already have them but all other access licences will be governed through a pumping rule relating to pool levels from year six of the Plan, or appropriate groundwater access rules for those licences in the alluvial areas.

### Aboriginal Cultural Values

- The initial consultation with local Aboriginal communities indicate that they consider healthy rivers with natural flows and good biodiversity as being important. Further feedback is being sought from Aboriginal communities about values in their area.

**For more information** about the macro planning process for the Hunter Unregulated and Alluvial Water Sources refer to the "Hunter Unregulated and Alluvial Water Sources – Background Document" on the Department's website: [www.dwe.nsw.gov.au](http://www.dwe.nsw.gov.au)

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of New South Wales, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.