

**TENTERFIELD WATER SUPPLY – DROUGHT AUGMENTATION WORKS  
STATUS REPORT – 22 November 2019**

<b>No</b>	<b>Task</b>	<b>Comments</b>
1	Emergency Drought Funding Application to Minister	<p>Following an application for funding to the Minister for Water, an amount of \$373,000 has been received, which is 75% of the funding for the first stage of the project. Funding for stage 2 to a maximum total of \$4,000,000 has been approved for a program of works to improve the water security for Tenterfield. The works include sourcing groundwater and appropriate water treatment; planning and infrastructure works. The new funding brings the total state government commitment to \$4,373,000 (exc. GST) and total project budget to \$4,497,333 (exc. GST).</p> <p>Council is preparing an amended Project Plan/Business Case to aid council with the rapid delivery of the project. The amended Project Plan/Business Case will be submitted to the relevant NSW Department for funding sign-off once the complete scope of the project has been finalised.</p> <p>Given the urgency of this project, <b>all</b> aspects of the work have been fast tracked. This explains why the delivery work has commenced before formal funding sign-off has occurred. (The government control has been recently transferred from DOI-W to Infrastructure NSW, so the formal processes have changed.)</p>
2	Water Search	<p>The objective is to establish <b>more than one reliable source of groundwater in different (separated) geological zones to ensure long term water security for the Town of Tenterfield</b>. The water search has been more extensive than initially planned. Consultants Geo9 P/L have identified numerous potential test borehole locations. Some are being investigated now, the locations of the remainder will be recorded for possible investigation at some time in the future.</p> <p>Virtual drilling is yet to be undertaken at Polworth Street and further assessment of the land behind the Tenterfield Transport museum to an increased depth of 300metres will be undertaken to establish the best location for a high capacity production bore to be constructed in the future – if required.</p> <p>Test bore sites have been investigated on Scrub Road. Unfortunately, neither of these bores produced sufficient water and will not be equipped. Two bore sites west of Rugby League Park are also being investigated.</p> <p>A survey in the vicinity of Shirley Park bore has been undertaken to inform decision making regarding the renewal or rehabilitation of this bore which is showing signs of structural failure.</p>
3	Drilling and Test Bore Establishment	<p>To date, three bores with good prospects have been identified in the area to the west of the Tenterfield Transport Museum. It is expected that at least one of these bores <u>combined</u> with ground water extracted from Shirley</p>

		<p>Park Bore will deliver at approximately 11L/s. This will support the needs of Tenterfield in the short term.</p> <p>Further, water bores constructed in the vicinity of the Archery Club and East St. near Billirimba Rd and Tenterfield Common have the combined capacity to deliver water at about 3 to 4 L/s. These four bores will be equipped as production bores over the coming weeks.</p> <p>Water supply works(s) and/or use approval applications are being submitted to the Natural Resources Access Regulator following the test bore locations being identified and suitability validated on site. Land ownership details for the test borehole sites are being progressively provided to NRAR to enable an expedited application process. NRAR have been very helpful in assisting council to attain the necessary approvals.</p>	
4	Infrastructure	<p><u>Bores</u> – Consultant Geo 9 P/L and subcontract Hydro-geologist Zoic Environmental P/L.</p> <p><u>Pumps</u> – Procurement arranged as hydraulic requirements for each bore site is determined.</p> <p><u>Electricals/SCADA etc.</u> – Quotations have been invited from selected providers</p> <p><u>Civils</u> –Tenterfield Shire Council. New rising mains are to be constructed connecting the bores at Transport Museum and Archery Club / East St to the Water Treatment Plant. The construction work has commenced and will continue over the next two to three months.</p> <p><u>Bore water treatment</u> – MJM Environmental have submitted their Water Treatment Options Report for the emergency bore field. Quotations for the temporary hire of a Reverse Osmosis (RO) water treatment unit have been assessed and a preferred supplier has been identified.</p>	
5	Drilling and Production Bore Establishment	<p><u>Bores</u> – Water Resources Drilling P/L</p> <p><u>Rising Main</u> Design &amp; Construct – Tenterfield Shire Council</p> <p><u>Electrical &amp; SCADA</u> etc.– Quotations to be invited from selected providers</p>	
6	Dam Water Management	<p><u>Destratification / Aeration System</u> - Acqua &amp; Co aerators installed. Additional subsurface aeration will be installed by Council to aid with aeration and mixing of the lower water in the dam.</p> <p><u>Remote dam water depth and quality measurement</u> – Procurement in progress.</p>	
7	Project Management	<p>Risk management and project insurances managed by TSC.</p> <p>Project management by Local Government Appointments consultant supported by TSC staff.</p> <p>Strategic project support is being provided by Clearwater Australia.</p>	
8	Water Quality Monitoring	<p>Managed by TSC with compliance overview by NSW Department of Health</p> <p>Technical design inputs by MJM Environmental P/L.</p>	