

**Submission  
No 50**

## **INQUIRY INTO ADEQUACY OF WATER STORAGES IN NSW**

**Organisation:** Tumbarumba Shire Council

**Date received:** 3/08/2012

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**Tumbarumba**  
**SHIRE COUNCIL**

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Our ref: W1-1  
Contact: Kay Whitehead

20 July 2012

The Hon Rick Colless MLC  
Committee Chairman  
Standing Committee on State Development  
Parliament House  
Macquarie St  
Sydney NSW 2000

Submission to State Development in regards to the inquiry into the Adequacy of Water Storage in NSW.

Dear Mr Colless

Tumbarumba Shire Council would like to submit following comments in regards to the inquiry into the Adequacy of Water Storages in Tumbarumba Township;

**Council's Comments:**

- The Tumbarumba Water Supply System relies on a single storage, the Tumbarumba Reservoir. It is 68 ML raw water off stream reservoir which is topped up from the Burra and/or the Tumbarumba Creeks when flow is above the environmental flow requirements.
- The reservoir has high rate of water leakage and siltation which has significantly reduced the reservoir capacity and yield of water that can be used. Approximately 45 ML of the total 68ML capacity is available for use.
- Water security in Tumbarumba during drought is a major concern for TSC. Flow in the Burra and Tumbarumba Creeks appears to be declining. Under present conditions it is apparent that the existing supply does not comply with requirements of the 5:10:10 Rule.
- Tumbarumba's demand is 350-400ML/a and the current system can only supply 140ML/a. As such there is a shortfall of approximately 260ML/a. Although Council is currently investigating additional supply from bores, the storage volume would still need to be increased substantially to provide for that 260ML/a shortfall.

- NSW Public Works is currently undertaking Safe Yield Studies of Tumbarumba Shire water resources, The following is an extract from the Draft Report;
  - The secure yield of the existing headwork system under current license condition is about 140 ML/a.
  - Increasing the cease to pump (CTP) flow in Tumbarumba Creek (per the Upper Murray Water Sharing Plan) from 5ML/d to 14ML/d would reduce the secure yield to 54ML/a, a reduction in secure yield of about 60%.
  - The analysis shows that the secure yield is limited by storage size and increasing the transfer capacity of existing sources will not increase yield.
  - Analysis showed that the system is highly sensitive and vulnerable to dry weather periods and the system would have failed about 7 times for the modelled period with three of the failures occurring between 2001 and 2010.
  - A pipeline link to Mannus Lake would overcome the secure yield shortfall.
  - Although modelling has not yet been completed, based on other similar studies a 1°C increase in temperature due to climate change/variability would have a significant impact on secure yield (a yield reduction of 40% is likely).
- The restoration of the 2300ML Mannus Dam following damage that occurred in the October 2010 flood could be a possible solution to securing the Tumbarumba town water supply but it is a very onerous approval process, both to secure funding to restore the dam, and to meet all approval requirements. Preliminary design and environmental studies have been underway for the past 12 months.

Council would be happy to provide further information to assist the Inquiry. Please contact Council's Director of Engineering Alan Lawrance on 02 6948 9114.

Yours faithfully

Kay Whitehead  
General Manager