

Questions on Notice taken during the hearing at Griffith 1<sup>st</sup> March 2017

## **Please find my reply's to page 34**

**The Hon. PENNY SHARPE:** I am interested in the temperature control curtain at Lake Burrendong. I do not know what that is. Can you explain to me what it is, how it works and who paid for it?

**Mr BEALE:** That is one I would have to take on board and get back to you, because Terry put it in here. We have talked about it, but that is as much as I know, to be honest.

**Mr MUIRHEAD:** I do not know about that.

**Mr BEALE:** I know it was something they trialled that is actually working.

**The Hon. PENNY SHARPE:** It sounds promising, that is why I was interested.

**Mr BEALE:** Yes, it is working.

**The ACTING CHAIR:** Can you take that on notice?

**Mr BEALE:**

## **Websites as requested**

### **[Burrendong temperature control structure - WaterNSW](http://www.watersnw.com.au/projects/environmental/burrendong)**

[www.watersnw.com.au/projects/environmental/burrendong](http://www.watersnw.com.au/projects/environmental/burrendong)

The **Burrendong** temperature control curtain is not currently operational due to some critical component failures. WaterNSW is assessing the possible repair options

### **1. 2. [Effectiveness of cold water pollution mitigation at ...](https://opus.lib.uts.edu.au/bitstream/10453/44199/1/01front.pdf)**

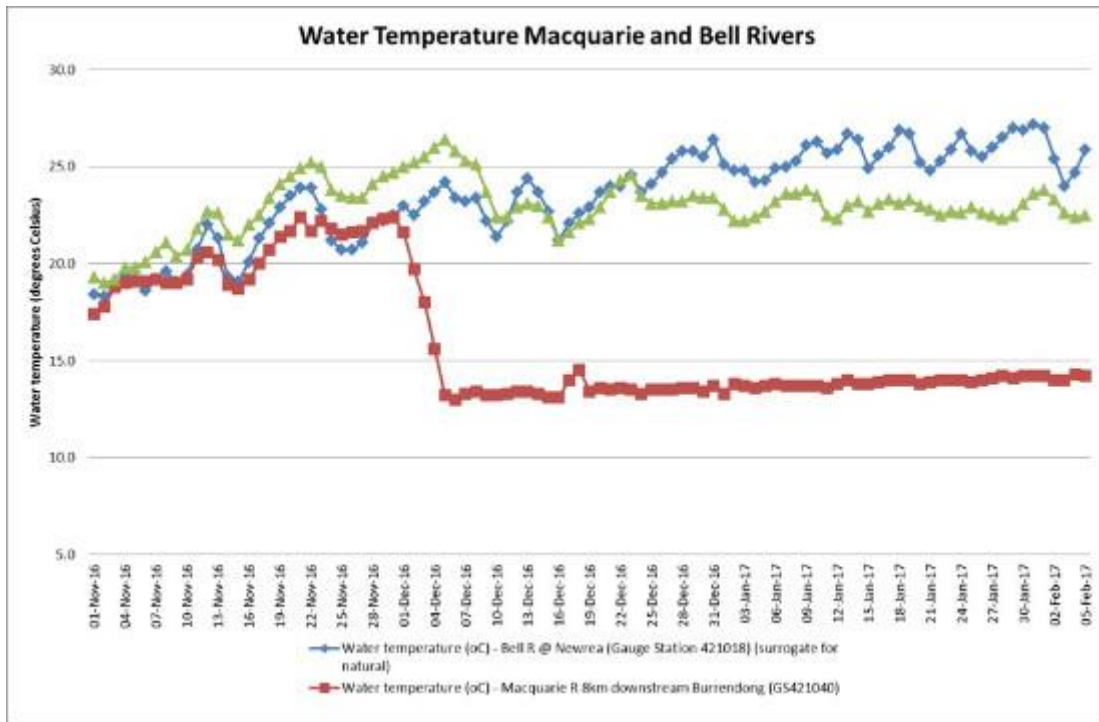
<https://opus.lib.uts.edu.au/bitstream/10453/44199/1/01front.pdf> · PDF file

Effectiveness of cold water pollution mitigation at **Burrendong Dam** using an innovative **thermal curtain** This thesis has been written in the style of a journal

### ***[Back to the drawing board for Burrendong curtain](#)***

The bad news for fish in central NSW's Macquarie River is that the Burrendong thermal curtain to reduce cold water pollution releases from the Dam has failed. The thermal curtain technology had been largely untested at the scale of the large dams that are typical of those on Murray Darling Basin rivers but was an attractive option to test because at just \$3-4 million they are relatively cheap to build and operate. Traditional concrete and steel multi-level offtake towers used to release water at different levels of the dam typically cost tens of millions of dollars to construct. The thermal curtain on Burrendong Dam commenced operation in July 2014, and since the dam had consistently been less than 25% capacity. Burrendong Dam filled during the spring and summer of 2016/17 and unfortunately, the curtain failed the 'full dam' test. A component at the bottom of 57 metres of water has broken and the curtain cannot be raised to the surface. Water NSW are currently

reviewing repair options.



While we swelter through a hotter than normal summer, the native fish in the Macquarie are ‘freezing their fins off’. The graph shows how water temperature in the Macquarie River is now responding. The dramatic plunge in the red line is due to releases being switched from the radial gates on the top of spillway where the water is warmest to the outlet at the bottom of the main wall where the water is colder. Graphic: Allan Lugg.

**Note the red line and imagine this impact on every major dam in the State.**

(Chris As discussed.

The attached graph shows a constant and NATURAL rise in the water temperature of the Macquarie and Bell Rivers as the summer warms the water to the mid 20s.

The Macquarie downstream of the Dam (Red) follows this pattern while the release is from the top of the storage, however we see a dramatic decline in temperature when the release is switched to the lower outlet.

This is typical of the problems with most of our major storages.

Regards Terry Maloney)

Answer to Question/Statement to from page 35

2. **Mr BEALE:** We have talked in the past about Lake Hume, because it is a huge storage. There often has been talk of a small inner dam at Tallangatta on the other meter arm. It would help slow down the cold water into the weir. It would keep back another 20 per cent for drought times and let the other one drain, and give it time to settle before it comes in the back of the weir. That has been talked about 40 years ago. It still gets talked about. I do not know why it does not go ahead. It is sequel. It is within a structure. It is not hard
- 3.

Webpages to research,

1. [\*\*The Narrows Project Feasibility Assessment - Towong Shire\*\*](#)

[www.towong.vic.gov.au](http://www.towong.vic.gov.au) > [Major Projects](#) > [Feasibility Studies](#)

Towong Shire Council is undertaking a comprehensive "once-and-for-all" Feasibility Assessment of **The Narrows Project** with input from leading experts in dam ...

2. [\*\*Park penned for Tallangatta | The Border Mail\*\*](#)

[www.bordermail.com.au](http://www.bordermail.com.au) > [News](#) > [Local News](#)

A FEASIBILITY study will soon start into a Lake Mulwala-type park at **Tallangatta**. The cost of the investigation into **the Narrows Project** in Lake Hume will total \$378,000.

3. [\*\*Lake park a step closer at Tallangatta | The Border Mail\*\*](#)

[www.bordermail.com.au](http://www.bordermail.com.au) > [News](#) > [Local News](#)

A REPORT will be released soon into the feasibility of a Lake Mulwala-type park at **Tallangatta**. An investigation into **The Narrows** plan has been handed to **Towong**



Hope this meets with the committees requests.

Chris Beale

Vice President

South West Anglers Association.