

Submission  
No 42

## INQUIRY INTO WATER AUGMENTATION

**Name:** Ms Judith Melville

**Date received:** 18 August 2016

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## General Purpose Standing Committee No 5

Legislative Council  
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10 August 2016

Dear Committee Members,

Re: **Inquiry into the augmentation of water supply for rural and regional New South Wales - Submission by Judith M. Melville, Yamba NSW**

**SYNOPSIS: *The regional economy of the Clarence Valley relies heavily on retention and enhancement of existing aesthetic, environmental, cultural, social and economic values associated with the Clarence River system. Additional inter-basin water transfer from the Clarence catchment cannot be justified on environmental and cost-efficiency grounds. Coffey Plan targets sub-catchment which supplies urban populations of Clarence Valley and Coffs Harbour with freshwater.***

Clarence Valley Council is responsible for a local government area of 10,441 square kilometres, with an est. resident population of 51,014 persons. [[profile.id](#), 2015]

The majority of the valley population is found in the vicinity of the river's saltwater tidal zone which extends for 109.5 km from the river mouth to the rocky rapids at Copmanhurst. [NSW Government, [Survey of Tidal Limits and Mangrove Limits in NSW estuaries 1996 to 2005](#)]

The entire est. 430 km length of the main Clarence River is within this local government area and, its associated major tributaries traverse it.

These tributaries supply the variable freshwater flows which keep the main river enriched and healthy and are vital to maintaining the marine biodiversity of the Clarence River estuary.

Indeed the Clarence River would not appear as large if these flows did not exist. The Mann River sub-catchment alone carries water from the Nymboida, Guy Fawkes, and Boyd Rivers, has an average annual flow of 1,472,270ML, and is estimated to account for 60-65 per cent of the water volume entering the "big" river. [Clarence Environment Centre, [submission](#) to Standing Committee on Regional Australia, *Inquiry into the impact of the Murray-Darling Basin Plan in Regional Australia*, 2010]

The upper Clarence River in 2007 at “Clarence View” a 115 year-old family farm:



Image: [abc.net.au](http://abc.net.au)

The Clarence River estuary is a significant component of the commercial/recreational fishing and water-based tourism which contribute to the local government area’s **“Gross Regional Product is estimated at \$1.73 billion, which represents 0.4% of the state’s GSP (Gross State Product)”**.

[\[http://economy.id.com.au/clarence-valley\]](http://economy.id.com.au/clarence-valley), 2015]

The annual prawn catch directly supports ninety-two (92) fishing businesses in the Clarence estuary. [NSW DPI, 2013, [NSW Commercial Fishing Industry Reform Program](#)]

The commercial fishing industry has an est. \$92 million annual output. [John Harrison, 2010, spokesperson, Professional Fishermen’s Association]

Council has a long history of responding to community concern about proposals to dam and divert fresh water from the Clarence River 22,716km<sup>2</sup> catchment area.

On 18 October 2006 Council resolved (Resolution 12.005/06):

**“That Council oppose the diversion, damming or re-directing of water from the Clarence River.”**

At its meeting of 17 April 2007 Council further resolved (Resolution 05.006/07):

**“That the report on the Clarence River diversion proposal be received and noted and that Clarence Valley Council reiterates its policy position of total**

***opposition to any proposal that would result in any diversion of water from Clarence catchments.”***

Then on 16 November 2010 Council again confirmed previous resolutions (Resolution 10.017/10):

***“The Council again register it strong opposition to any plans to divert waters out of the Clarence catchment.”***

On 9 August 2016 Council unanimously voted in favour of this motion (Item 15.081/16):

***That Council:***

***1. Reiterates its policy position of opposition to any proposal that would result in any diversion of water from Clarence catchments, as previously resolved by Council resolutions 12.005/06, 05.006/07 and 10.017/10.***

***2. Endorse the attached submission to the Legislative Council’s “Inquiry into the Augmentation of Water Supply for Regional and Rural New South Wales”.***

In passing these resolutions Clarence Valley Council was informed by its own policies, planning instruments, studies and reports undertaken on its behalf and NSW Government reports such as that by the Healthy Rivers Commission’s 1999 *Independent Inquiry into the Clarence River System*. [NSW DLWC, [Health Rivers Commission, Independent Inquiry into the Clarence River System](#), 1999, Final Report]

Council is additionally informed by community sentiment and the findings of community consultation undertaken during the formation of the *Clarence Estuary Management Plan* which states in part:

***“All the major economic sectors in the lower Clarence Valley are dependent to a considerable extent on understanding and protecting the estuary’s and floodplain’s natural processes and values.....***

***The outstanding threat nominated by the Maclean group was population growth and urban development, particularly where this is located close to the estuary. This is an interesting result, given that the Clarence overall is not an urbanised waterway. It may reflect the rapid changes that are occurring in Yamba, and the view in the community that further growth in this area will require major sustainability issues to be addressed. The appropriate growth rate and style of development in Yamba has been a major source of discussion for residents in the lower Clarence, especially in response to Council’s interpretation of the results of its community survey on the future of Yamba. Several other frequently nominated threats were examples of the types of threats that are associated with poorly managed urban growth that exceeds***

***the capability of the natural system. Declining health of the estuary (from any cause) was perceived as a major threat by the lower Clarence community, acknowledging the high economic dependence on estuary health in this area.”***  
[NSW DLWC, Umwelt (Australia Pty Ltd, 2003, [Clarence Estuary Management Plan: The Clarence Estuary - A Valued Asset](#)].

In August 2012 I made a submission to NSW Legislative Council Standing Committee on State Development’s *Inquiry into the adequacy of water storages in NSW*.

The report from that 2012 inquiry forms part of the terms of reference for this present inquiry.

As there has been little change to the aesthetic, environmental, cultural, social and economic values of the Clarence River system since that date, I draw the Standing Committee’s attention to the contents of that submission.

[\[https://www.parliament.nsw.gov.au/committees/DBAssets/InquirySubmission/Summary/36858/0090%20Judith%20M%20Melville.pdf\]](https://www.parliament.nsw.gov.au/committees/DBAssets/InquirySubmission/Summary/36858/0090%20Judith%20M%20Melville.pdf)

In particular I ask the committee to note this section of my previous submission:

***“The Clarence catchment falls within two distinct climatic zones, with the temperate inland zone (roughly equating with 19,080 square kilometres) having higher summer and cooler winter temperatures and generally lower rainfall than the sub-tropical coastal zone. This inland zone covers the upper reaches of many of the Clarence River’s freshwater tributaries [Land and Water Australia, Research and Development, 1999 and CSIRO & Bureau of Rural Sciences & Bureau of Meteorology, 2004, 2008].***

***As much by happy historical accident as by considered design the Clarence River and its tributaries are relatively healthy in comparison with other eastern Australia river systems. Nevertheless, the rivers within the Clarence system remain variable and, some bodies of water such as Lake Wooloweyah teeter on a fragile balance [NSW DLWC, Health Rivers Commission, Independent Inquiry into the Clarence River System, 1999].***

***The Clarence River catchment has few impediments on natural river water flow within its boundaries. However, major water infrastructure does exist in the form of the 30,000 megalitre Shannon Creek side dam, the 5,600 megalitre Karangi water storage dam holding water piped from the Orara and Nymboida rivers, the 100 megalitre Rushford Road reservoir, the Nymboida River weir and a few remaining irrigation licenses [Clarence Valley Council, North Coast Water business unit, Regional Water Supply Strategy, 2010].***

***These water storage/water management facilities are considered adequate for both current population numbers and future population projections. In 2011 the Clarence River catchment supplied fresh water to an estimated 52,816 residents living in the Clarence Valley local government area and, to another 73, 296 residents in the Coffs Harbour local government area which is located outside the catchment and historically is provided with a significant measure of water security by the Clarence Valley [Clarence Valley Council, Clarence Valley Economic Monitor, June 2012 and Coffs Harbour City Council, Community Profile, June 2011].***

***Population growth in the Clarence Valley is expected to stabilise through natural increase and net migration by 2036 and future population growth is expected to be strong in the Coffs Harbour area [Planning NSW, New South Wales Statistical Local Area Population Projections, 2006-2036, March 2010]. Clarence Valley local government follows best practice in relation to water extraction and sustainable yield is predicated on an allowable daily volume rather than an annual yield figure [Australian Government, Natural Water Resources Atlas, May 2009].***

***Because rivers within the catchment are highly variable and the call on fresh water resources is constant in a region experiencing sustained population growth, there have been mandatory year round water conservation measures in place since 19 June 2007 [Clarence Valley Council, Water Restriction Policy for Clarence Valley Local Government Area, 2007].***

***I note that the Lilydale gauge readings (which provide the most accurate flow figures available) indicate that water discharge into the sea is less than two million megalitres per year on average [Clarence Environment Centre, Inquiry into Additional Water Supplies for South East Queensland - Traveston Crossing Dam, Submission 214 to Senate RRAT Committee, p.3].***

***The Clarence River catchment has not been immune from the general drying trend that eastern Australia has experienced in modern times.***

***Areas within the catchment experienced marginal to severe drought conditions in October-November 2000, June-December 2002, January-November 2003, June-December 2004, January-November 2005 and November 2009 [NSW Dept. of Primary Industry, Industry and Investment, archived drought maps].***

***It is not unusual to find the Clarence catchment mirroring drought conditions elsewhere in New South Wales and to the same degree....”***

Further to this I would point to the fact that state and local governments, along valley communities, have forgone the use of large tracts of land in order to keep the

Clarence catchment area as biodiverse and healthy as possible under sustained population pressure:

***A large proportion of the Clarence River catchment comprises national park (20 per cent) and state forest (30 per cent). These protected areas have helped to reduce human impacts on the river.*** [NSW DPI, 2016, [Clarence River Catchment](#)]

I note Griffith City Council's [Submission Number 17](#).

This submission recommends consideration of "***A scheme for diversion of Clarence River tributaries west to the Dumaresq River***". [David D. Coffey, unpublished report, 1988]

There have been four versions of the Coffey scheme of which three were published and currently the fourth appears to rely on the creation of at least three dams in the Clarence River catchment – on the Henry (at Newton Boyd), Nymboida, Timbarra and/or Mann rivers. [S. Ghassemi & I. White, 2012, [Interbasin Water Transfer: Case Studies from Australia, United States, Canada, China and India](#)]

I draw the Committee's attention to the fact that the Clarence Valley urban water supply is drawn directly from the Nymboida River, with the Shannon Creek "off stream" dam west of Coutts Crossing (built to drought-proof the Coffs-Clarence water supply) only been draw on when the markedly variable Nymboida is experiencing low water flow.

Any damming in the upper Clarence River catchment would place the Clarence Valley-Coffs Harbour City sustainable water storage management plan at risk.

The Coffey scheme takes no account of the fact that strong natural freshwater flows assist spawning runs of Australian Bass and the endangered Eastern Freshwater Cod, nor that 'freshes' have a major influence on landings of school prawns (*Metapenaeus macleayi*) which are commercially valuable to the Clarence Valley economy and often marketed as 'Yamba Prawns'. [NSW DPI, [Wild Fisheries Research Program: Status of Fisheries Resources in NSW, 2008/09](#)]

Other local industries which rely on a healthy river system are tourism, sugar, general agriculture, cattle and forestry.

With regard to tourism; the total number of visitor nights spent in the region was approximately 1,676,000 and average annual total spend by visitors to Clarence Valley was \$261 million per annum over the four years to September 2011. With the most visitor numbers be being recorded in towns and villages within the Clarence River estuary [Clarence Valley Council, 2012, [Clarence Valley Economic Profile](#)]

Clarence Valley Council and valley communities have looked at the Coffey scheme when it has been mooted in the past and made an evidence-based decision that it

risked diminishing or destroying Clarence River estuary values as well as more broadly failing on wider environmental and cost-effective grounds.

Nor has either Council or valley communities been convinced by the argument that more dams would significantly assist flood mitigation on an ancient 500km<sup>2</sup> floodplain.

My submission is not an exhaustive list of concerns regarding yet another attempt by interests in the Murray-Darling Basin to co-opt the natural resources of another regional area and of coastal communities which have been successful in managing their river systems.

I respectfully request that the Inquiry not include any form of additional water storage, for the purpose of inter-basin transfer of freshwater from the Clarence River catchment area, in its recommendations to government.

In anticipation and appreciation of your assistance with this matter.

Yours sincerely,

**JUDITH M. MELVILLE**