

**Submission  
No 90**

## **INQUIRY INTO WATER AUGMENTATION**

**Organisation:** Clarence Environment Centre

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# **Submission**

**to**

**General Purpose Standing Committee No. 5**

**on**

**The inquiry into the effectiveness of NSW  
government agencies responsible for the  
augmentation of water supplies for rural and  
regional New South Wales**

**Compiled by John Edwards  
For the Clarence Environment Centre  
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# **Submission to “The inquiry into the effectiveness of NSW government agencies responsible for the augmentation of water supplies for rural and regional New South Wales”**

## **Introduction**

The Clarence Environment Centre (CEC) has maintained a shop-front in Grafton for over 26 years, and has a proud history of environmental advocacy. The conservation of Australia's natural environment, both terrestrial and and marine, has always been a priority for our members, and we believe the maintenance of healthy ecosystems and biodiversity is of paramount importance.

As a major contributor to the protection of the largest coastal river system in coastal NSW, the Clarence, the CEC is determined to ensure that the Clarence River's relatively pristine ecosystems are not vandalised, and to improve outcomes for all rivers in Australia.

## **Summary**

It seems from the recent resurrection, by Griffith Council, of the 10 yearly plan to divert the Clarence River into the Murray Darling system that, as usual, past mistakes and their disastrous consequences are once again forgotten.

- The Snowy Mountains scheme that killed off the Snowy River, and will, with the continued loss of snow melt as a result of climate change, will ultimately end up as a blight on the landscape.
- The current investigation on how to 'rescue' Broken Hill from it's water shortage predicament, as its man-made Menindee Lakes dry up. That drying up is a result of the decision to irrigate semi desert areas of central Australia to grow, not food, but of all things cotton, and allow massive diversions of water from the Darling river by operations such as Cubby Station.
- Massive dams in northern central NSW, such as Ivanhoe and Keepit, which are never more than a puddle surrounded by thousands of hectares of weed-infested wasteland, are the consequence of past knee-jerk reactions to drought. They have been spectacular failures in terms of meeting their objectives, and environmental disasters.
- The continued over-extraction of water that has seen the Murray Darling system turned into a national disgrace, much of it reduced to a salt-ridden wasteland of skeletons of once majestic River Red Gums.
- The ongoing depletion of the Great Artesian Basin's water supply through unregulated drilling of bores in the early years of European settlement, has now been exacerbated by the decision to allow the hydraulic fracturing of underground rock strata to extract coal seam gas. That fracking process has been allowed to continue despite nobody able to guarantee that permanent damage to that critical resource will not occur.

Even in the Clarence, we have seen our man-made disasters, with the diversion of massive quantities of water from the Nymboida River to drive a now defunct power station for over 90 years. The resultant erosion of Goolang and Blaxlands Creeks, and the siltation of the lower Orara River system as a direct result, combined with the starving of the Nymboida River of its natural flows, will likely never be repaired.

The simplistic arguments, with their attendant falsehoods regarding flooding and the waste of water flowing out to sea from the Clarence River which could be solved by diverting the excess water inland, must be seen for what they are.

There is a finite amount of water on this earth, and the Australian continent is the world's driest. **Use it wisely!**

**Here are some relevant quotes:**

***“It is apparent that any proposal to divert substantial quantities of water from the Clarence would present significant risks to the health of riverine ecosystems, and those activities and values dependent on them.”*** Commissioner Peter J. Crawford, Healthy Rivers Commission: **Final Report, November 1999 (page 156).**

***It is important to note that freshwater flows through catchments or into the ocean are not wasted. It is an essential element of downstream ecosystems.”***

**The Hon Malcolm Turnbull, Minister for the Environment and Water resources, 2007.**

***“...we move beyond last century's solutions. Building a dam... would be an expensive, ineffective response - it would take years to build and even longer to fill, not to mention the damage done to the surrounding farmland and natural areas.”*** Late Premier of NSW, the Hon Bob Carr:

**In environmental terms, the no dam option would be highly desirable and beneficial**  
**Recommendation of the World Commission on Dams**

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## **General comment**

As the inquiry's terms of reference suggest, be the building of yet more dams, we should point out that water has already been over-allocated for most river systems.

We are not in the position to comment in detail on any river systems across NSW. However, in our own Clarence Valley, we point to the recently approved Water Sharing Plan (WSP) for the Clarence River which makes the following claim *“The only significant water management structure present in the catchment is the Nymboida Hydro-electric Power Station”*, followed by the claim that: *“Storing water from the Orara River, the weir was constructed across the Nymboida River near the township of Nymboida, with surge tanks at Goolang Creek”*.

Quite clearly, the weir on the Nymboida River captures water from that river, and stores nothing from the Orara. If that is the quality of information available from that document, it does not fill us with any confidence that those charged with managing water resources have any idea what they are doing.

The WSP also makes the point that at the time of writing the Nymboida power station was inoperable. The fact is that at the time of publishing the document, Essential Energy, the station's operators had informed the public 12 months earlier that the facility was to be decommissioned. This has significant implications for average flows in the Orara River which have been boosted by an estimated 50% by the transfer of the Nymboida River's water, through the power station, into the Orara, as much as 750ML per day.

As that additional flow has been present for 90 years, the entire time that flows in both rivers have been measured, the sudden cessation of the flow from the power station makes a mockery of the flows recorded in the Orara River's “Report Card”. Again, this change is not reflected in the WSP.

The recording of “mean” flows, i.e. the mid point between 2 extremes, as an indicator of the amount of water available for use in a river system, is meaningless. Rivers like the Orara and Nymboida, and indeed the Clarence itself, are subject to enormous floods, where more water can flow down that river in one week than for an entire normal year. These floods are unmanageable, unless there are massive empty dams in place to store that water, so those extreme flows must be discounted before “available water averages are calculated.

Looking at the charts (page 37) detailing

## **Water licensing**

A recent case in the Clarence Valley has highlighted a concerning fact that blueberry growers are buying up water licences, revealing the fact that a single property owner can acquire the entire entitlement from any one section of river.

Currently there is no monitoring to ensure compliance with rules relating to “cease to pump”, and with no meters required to show how much water is actually pumped from the river, this entire system is wide open to abuse and should be protected.

In the case of the Orara River system, the dramatic reduction of flows in that system resulting from the closure of the Nymboida Power Station have not been acknowledged, and water licences have not been reviewed. Those licences are now being traded to the highest bidder. This needs to be controlled and properly regulated.

## **Harvestable rights – a case study**

In northern NSW, we have a burgeoning blueberry industry, a crop that is grown almost hydroponically, usually on very low fertility soils (cheap to acquire), where water is a primary concern, and as a result growers are doing everything possible to secure supplies.

So we need to focus on the reality of what is really happening through the Bawdens Bridge blueberry proposal case study:

1. Bawdens Bridge Blueberry proposal is a large grazing property (Linden Park), in excess of 1000ha. The proponents have acquired (purchased) a licence to extract 66Ml annually from the Orara River, and plan to acquire further licences if or when available.

They have also dug a huge hole, building a dam on Chain of Ponds gully which they say will hold over 60Ml, and which they are allowed to build on a 2<sup>nd</sup> order stream, to hold their 90Ml harvestable rights. Despite significant clearing of gully vegetation containing a possible EEC, and habitat for threatened fauna known to occur in the vicinity, including core Koala habitat, no environmental assessments or even application for approval are required.

According to SixMap image there are already 15 dams on the property, the total capacity of which is apparently unknown (this should have been considered to determine whether or not the proponent needed a licence). There are also mooted plans to build additional “off stream” storages to hold the un-metred 66Ml licensed extraction from the Orara River, which also require no approvals, even though the Councils LEP does not allow the construction of “water storage facilities” on RU2 zoned land.

Moving on: the Water Regulation Officer with DPI Water, Grafton, confirms: *“The harvestable rights relate to dam capacity not to actual usage so there is potential to capture and use more water than the actual dam capacity in an irrigation year. There are reliability factors taken into consideration in the multipliers and obviously some seasons would provide more water into the dams than others”*.

In short, with unlimited off-stream storages, it would be possible to harvest all the water from the 2<sup>nd</sup> order stream, transfer it to storages and collect further run-off, which could actually be run-off from other properties across which that stream meanders, removing any environmental flows from the water course below the dam, and starve down-stream properties of their share of water.

**Conclusion: The entire process whereby harvestable rights are calculated, is flawed and open to abuse, so must be changed. We strongly believe that dams for harvestable rights should be restricted to first order streams.**

## **River diversions**

For this section of our submission we focus on the perennial, or more correctly – decadal, proposal to dam the Clarence River and divert its water inland to irrigate water hungry crops such as rice and cotton via the Murray Darling system.

It is almost 10 years ago that the then Minister for the Environment, Malcolm Turnbull, called for an investigation into the possibility of damming the Clarence to provide water to south east Queensland. At that time the Clarence Environment Centre met with Mr Turnbull and presented him with a comprehensive document, focussing on the myths surrounding these ten yearly proposals, and the plethora of reasons why such a proposal should not be contemplated. We attach that document as a part of this submission.

The simple cost effectiveness of such a scheme, costing billions to construct and many millions of dollars annually to run, to provide a handful of irrigators some additional water, makes no sense at all, and the enormity of the environmental damage that would be caused by such a scheme cannot be contemplated.

In the past, mega dams were the grand vision, dams that would flood more than 200km of rivers in wilderness areas along the Mann, Nymboida, and Boyd Rivers. The latest proposals talk about taking 20% of the Clarence River flows by damming numerous tributaries along the Great Dividing Range such as the Mann River, Washpool and Timbarra Creeks, whose combined flows at the proposed dam sites will barely amount to the desired 20% total. This would mean all of those rivers would be run dry, but nobody stops to consider the consequences of such simplistic proposals as “we will only take 20%, 1 million megalitres”.

And this is where the myths come in. It is always recorded that the Clarence River delivers 5 million megalitres of water into the ocean each year, even though the Lillydale gauge, set just above the tidal pool, has measured only 3.7 million ML on average. Therefore either the proponents of the scheme will either have to settle for 700,000ML or the Clarence will be asked to provide more than 25% of its flow, much of which will have seeped away or evaporated before it ever reaches its destination at Griffith.

We end this with a quote from Australia's Prime Minister, when he was the Minister for the Environment in the Hawke Government:

*“Water diversions will primarily interfere with existing environmental flows. It is often flippantly stated that any drop of water which passes through the system unused is a wasted drop. It is important to note that freshwater flows through catchments or into the ocean are not wasted. It is an essential element of downstream ecosystems.*

*Any infrastructure decision would have a significant impact on the plants and animals in the system and is likely to compound existing environmental problems. Hundreds of square kms of*

*vegetation would be either cleared or disturbed. The mating and migratory patterns of numerous native animals could be fundamentally altered. Consideration should also be given to the increased emission of greenhouse gas as a result of operating such a system.*

*Altered flow regimes could also have significant social impacts on communities near the river by affecting primary production, industry activities, and recreation existing in the area.*

***Conclusion***

***The wide ranging economic, environmental and social implications of diverting rivers and piping water make such projects prohibitively expensive, and socially and environmentally disruptive.”***

We thank the Standing Committee for this opportunity to comment

Yours sincerely

John Edwards  
Honorary Secretary