

**Submission  
No 83**

## **INQUIRY INTO WATER AUGMENTATION**

**Name:** Mr Cyril Smith  
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The Director

General Purpose Standing Committee No. 5

Parliament House

Macquarie St  
Sydney  
NSW 2000

Re: Inquiry into the augmentation of water supply for rural and regional NSW

Dear Director

I would like to take the opportunity to comment on the above Inquiry, mainly in reference to the Central West Region of NSW. I totally support the purpose of the Inquiry as the availability of water is a great concern to everyone.

A timely Inquiry in so far as Orange acquiring a pipeline we didn't need (CWD report July 2015) and the possibility of Broken Hill requiring a pipeline to satisfy its urban needs.

This situation may indicate that there should be a change to the philosophy of; "how much water can be extracted from the river system to how much water can be retained in the river system".

1 a) In arriving at a sustainable water equation (Water Sharing Plan WSP?), it will be interesting to note the percentage of water allocated to agriculture, mining, urban use and the environment. We must be mindful that the river environment had 100 percent (significantly close) of the flow water 200 years ago. I can see that the equation will vary depending on the region it applies to. Can we afford to allocate something like eighty (80) percent of available water to agriculture?

b) The new water equation (WSP) will give us a guide to the suitability and dependability of the water storages in NSW. It must be remembered that building water storage dams actually takes water from the river system due to evaporation and leakage. In some cases this can be substantive. In summer the water storage dams for Orange could lose an amount of water at approximately the same as the usage.

The Centroc Water Study 2009 was a worthwhile report into the water requirements, for the Central West, into the future. The report needs to be reviewed and developed further to meet the changes that have occurred and expected to occur.

I would be very cautious with any proposed aquifer water recharge systems. I could see that recharge may be beneficial in the sandy soils of the lower Darling and Murray River system but not in the basalt Orange area. I doubt that the water quality of the recharge could equate with the quality of water currently in the aquifers of the Orange district. Orange City Council should stop investigating any future plans to recharge the local aquifers. The water from the basalt aquifers in the Orange have been directly used by residents for over hundred years.

c) I haven't read the reports into the adequacy of water storages but wait with interest to read the feasibility study into the proposed dam on the Belubula River. After witnessing the approval process of the Macquarie River to Orange Pipeline I have little faith in the NSW approval process. I'm of the opinion, that there is far too little input by the wider community at the early stages of a new project. The community concerns and appraisal should be considered and addressed in any feasibility study.

d) Examining the floods affecting urban and rural areas should be considered differently.

Urban flooding affects homes and businesses at great cost. The possibilities of levee banks and diversions to the flood flow should be considered in reducing the damage caused by flooding. Bathurst Regional Council for many years has promoted the retreat from the flood plain by buying properties on the flood plain. Proper planning, possibly using urban water sensitive design, by local authorities is required for future urban development.

Damming rivers and restricting natural floods in rural areas does affect the ecology of the river environment. The flooding of river flood plains is beneficial to the future farm productivity and essential for native river forests and wetlands. A full cost analysis should be undertaken to determine the full effects of flooding in rural areas and how farmers can best cope with flooding damage.

e)

f) It would be of interest to find out why the NSW State decided that the augmentation project for the Menindee Lakes (about 2010) didn't proceed. Did the extraction of water upstream impact on this decision? Did the feasibility show that there was insufficient available water to maintain the Menindee Lakes? Was securing water for agriculture including cotton crops more important than securing water supply to supply towns (like Broken Hill)?

Surprisingly, the Macquarie River to Orange Pipeline received \$20 million of Federal funding from this abandoned project.

Any future water studies should take into account the impact of extractions on the "unregulated" waterways.

A better balance must be found between the competing sections demanding water; agriculture, mining, urban consumption and the environment. The Murray Darling Basin Plan acknowledges that there is an over allocation of water to unsustainable levels.

Agriculture consumes far too much water at present ( about 80% of available water in Australia) and should be reduced into the future. Many farmers and rural people have accepted this fact but there are some vocal people and organisations that have not. The mind set for irrigators requires changing. They see water in a river and think: "I could use that water to grow a few more melons or another bale of hay" instead of considering who else may require that water. Introducing more efficient water use is good but it shouldn't follow that the water saved should be diverted to increasing production but used to reduce the over allocation of water. Agriculture is an in-efficient use of water given the quantity of water used compared to the economic returns, although a necessary industry.

Mining in Australia may use about 4% of the available water in Australia but in the Central West NSW this may be very different. Orange consumes, based on extraction minus possible return of treated water, approximately 2.5 ML/d (megalitres per day) whereas Cadia Valley Operations (CVO) currently consumes about 50ML/d. It appears that Cadia consumes 20 times the quantity of water compared to Orange with a population of 40 000. I haven't seen any research that would show Cadia producing 20 times the economic productivity compared to Orange. The recently approved Cadia east project could see an 18% increase in water usage (Cadia East DA). The DA indicates an increase of 20 employees at a time when CVO are decreasing their workforce by hundreds (100s). I would conclude that water consumption for mining does not have the same rate of return as for the urban use of water. I can see allocating water to future mining activities could hinder the diverse urban economic development of the Central west.

A full water study is required for the Central West in order to ascertain what water is sustainably available and how it can be utilised. The Centroc Water Study 2009 should provide a starting point.

g) No one should begrudge the amount of water currently allocated to the environment but look at means to increase it. The Murray Darling Basin Plan should be fully supported (noting that John Howard was very supportive of the Plan).

Timing the use of environmental water is another area for further investigation.

The building of dams does interfere with the natural water flows and the ecology of the river systems. I would suggest provisions be made so that environment water could be held over ("banked") until a suitable time for its use. Consideration should be given to building diversions that could see river gum forests flooded and wetlands when required or on a near natural cycle.

I feel that it would be appropriate to re-instate the National Water Commission or establish another independent body to oversee water in Australia. The Murray Darling Basin Authority could be section of any new authority.

Hopefully, the unregulated waterways would come under supervision of the new authority and be governed by similar rules to the regulated waterways. This Authority needs to be independent of the State and Federal Governments. Hopefully a good working relationship could be achieved.

Defining a regulated stream/river should not depend on the organisation(s) overseeing water releases but whether the water in any stream/river is governed by regulations. I would consider that the local streams and the Macquarie River below Orange are regulated because of the conditions set for environment flows from Suma Park Dam and Ben Chifley Dam (Bathurst). A regulated waterway should not, in my opinion, be defined by State Water releases.

The Macquarie to Orange Pipeline clearly exemplifies the problems associated with political interference in achieving a useful and sustainable water project. A waste of funds, about \$50 million, on a water project that Orange "didn't need" (CWD 4<sup>th</sup>/5<sup>th</sup> July 2015). Council's own website, during the approval period, contained information on the potential of the stormwater harvesting systems that could have satisfied the expected water demand for Orange.

The Agreement between the State and Federal Governments for this pipeline project was for the "implementation" of the pipeline and not for the evaluation and consideration of better options for water security for Orange (and region). This forced, in my opinion, any government agency or consultant to look at "mitigating" the impacts of the project and not to consider the worthiness of the project. The approval process could have made it improper for government agencies to give (in my opinion) independent and professional advice on the project.

The Orange and Region Water Security Alliance submission on the Macquarie Pipeline would be a good reference to consult.

It would appear to me that the airport at Orange was developed in an unsuitable location being an aquifer recharge area. Council wish to compound this misguided development by seeking development approval of an industry park adjacent to the airport. This development, within a few hundred metres of Orange's second water storage dam and in the catchment of the main storage, could have disastrous impacts on Orange's water supply from possible contamination. Will NSW Planning see fit to rezone the land from prime agricultural and an important aquifer recharge area?

The approval process for water projects and developments that may have adverse impacts are concerning when the proponent and the approval authority are one. The Orange to Blayney/Carcoar Pipeline is an example where Orange City is the proponent and the approval authority. It does not give anyone confidence in the approval process when there is no need for public exhibition of the project, no peer review when the project is of a size that could be consider by the Planning Assessment Commission.

There is a need for a more open approval process where communities are engaged at a much earlier stage, government agencies given the independence to critically evaluate the strengths of any project and consultants to be accountable for the manner in which they compile a project report for the proponent. Any worthwhile project should survive proper assessment.

Please feel free to contact me for further clarification and information.

Yours Faithfully  
Cyril Smith

14<sup>th</sup> August 2016