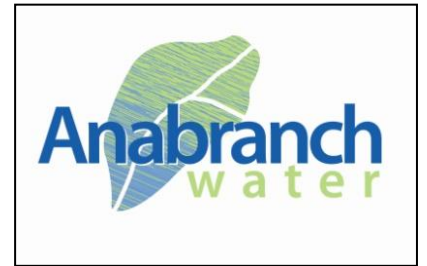


Submission
No 32

INQUIRY INTO WATER AUGMENTATION

Organisation: Anabranh Water

Date received: 9 August 2016



NSW Parliament Legislative Council
General Purpose Standing Committee No. 5

Inquiry into the augmentation of water supply for
rural and regional New South Wales

A Submission by the Anabranch Water
August 2016

Anabranh Water

Anabranh Water is the Board of Management for the Great Anabranh of the Darling River Private Water Supply and Irrigation District (supplying Stock, Domestic and limited Irrigation water to 62 landholders) as published in the NSW Government Gazette on 25 November 2005. Formation of Anabranh Water followed completion of the Darling Anabranh Pipeline and Environmental Flows project which set about to save 47GL of water annually and return it to the environment. As part of the project the NSW Government committed to providing environmental flows down the Great Darling Anabranh to support not only the terrestrial, and aquatic flora and fauna of this 480 km stretch of River, but also to contribute to the social fabric of this strong agricultural region.

The Darling Anabranh Management Plan

The precursor to Anabranh Water and the Darling Anabranh Pipeline and Environmental Flows project was 'The Darling Anabranh Management Plan' (Nias 2002). As reported in 'Assessment of environmental water requirements for the proposed Basin Plan: Lower Darling River System' (MDBA, 2012), Nias (2002) proposed;

An environmental flow for the Darling Anabranh of 60 to 75GL per release with a two-year frequency averaged over 10years, along with requirements that:

- an end-of -stream flow should occur for each event;
- between 1,500 and 2,000ML/d for 30 to 45 days should be released to the Anabranh; and
- periods between environmental flows should not exceed three years.

Lake Cawndilla or High Darling River Flows

Environmental flows can only be released to the Great Darling Anabranh via two waterways; Lake Cawndilla and Packers Crossing Regulator, and/or the natural Anabranh offtake along the Darling River channel (provided flows are at a minimum of 20GL per day as measured at Weir 32). Without one or both of these two options being available at the intervals as required by the Nias (2002) proposal, then the government's commitment to provide environmental flows to the Great Darling Anabranh cannot be met.

The Impact of Changed Water Management for the Lower Darling and Anabranch

Social

When the Great Darling Anabranch is flowing there are numerous valuable recreation activities pursued. These include; canoeing, bird watching, camping, boating, relaxing and possibly the favourites, fishing and yabbing. Fishing, supported by high fish stocks, saw a real resurgence in the most recent flow event. The high fish stocks may have been due to the changed flow regime created by the removal of the old Great Darling Anabranch blockbanks.

Vegetation

Whilst the larger more visible vegetation along the Great Darling Anabranch mostly remains during dry periods, its condition declines and restored health is only achieved after a flow event. This is explained by Bogenhuber below where the monitoring period began with a lengthy dry and finished with a flow event:

‘There was a strong vegetation response over the monitoring period, including an increase in Lignum and riparian tree condition, and vigorous germination and growth of damp-loving and amphibious understorey plant species.’ (Bogenhuber et al 2013):

Aquatic

It goes without saying that the positive change in the aquatic wildlife along the Great Darling Anabranch during flow events is significant. From birds and insects to fish, frogs and yabbies, they all multiply enormously. However, the value of the flow events stretches further than just to the value seen in the Great Darling Anabranch itself and a great example of this extended value is explained by the following phrase from Bogenhuber et al (2013):

‘The return of the Darling Anabranch to an ephemeral system increased fish diversity from six species in 2002 (during regulation), to 13 species throughout the 2010–11 and 2011–12 overbank flows. The Darling Anabranch has been identified as an important habitat for the viability and recruitment success of native fish species in the Murray-Darling Basin and our data support this. The successful management of the Darling Anabranch as an ephemeral system may be crucial to supporting a diverse and abundant Murray-Darling Basin native fish community.’

Business

Changing the flow regime along the Lower Darling to a less permanent system will have negative impacts on the operation of businesses of the area. Anabranch Water in particular will see increased costs and increased business risk should there be longer periods of low or no flow in the Lower Darling. The location of the Anabranch Water pump site at Polia on the Darling, was strategically chosen to feed water into the top end of the Anabranch Pipeline. This site is the second of two pump stations and serves to manage the risk to the system if the other site (at Fort Courage on the Murray River) were to

fail. Also, given that the Polia site is located at a higher elevation it is cheaper to pump water from this site through the pipeline network, rather than pump it all 'up hill' from Fort Courage. Therefore, not having the option to pump from Polia at any stage will increase costs and risk to Anabranh Water.

Conclusion

Anabranh Water is grateful for the opportunity to make a submission to the NSW Legislative Council Inquiry into the augmentation of water supply for rural and regional NSW.

Anabranh Water has attempted to relay the many benefits associated with maintaining a flow pattern that most closely resembles an ephemeral system for the Great Darling Anabranh River. Anabranh Water has also highlighted the negative impact that reduced or no-flow down the Lower Darling River will have on business.

Anabranh Water seeks the commitment of the NSW and Commonwealth Governments to adhere to the ephemeral flow regime proposed by Nias (2002) and to minimise the manipulated low and no-flow conditions for the Lower Darling River.

If the Committee requires further detail on this submission they can contact the Anabranh Water office on (03) 50231131.

References

Bogenhuber D, Linklater D, Pay T, Stoffels R and Healy S (2013) The Darling Anabranh Adaptive Management Monitoring Program Final Report 2010–2013 Baseline to a decade. Report prepared for the NSW Office of Environment and Heritage by The Murray-Darling Freshwater Research Centre, MDFRC Publication 11/2013, June, 171pp.

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