

INQUIRY INTO WATER AUGMENTATION

Organisation: Lower Darling Residents

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Murray Darling Proposal - a collaborative approach

Local black and white elders and land holders in the Lower Darling have contributed to this submission

The separation of environmental flows from irrigation flows is of course necessary on paper. However in practice, the best use of environmental water is to send it down in explicitly timed ways that encourage native fish breeding and flood billabongs and low-lying riparian zones.

Weirs in carefully considered locations could assist with this as long as a free flow of water was continuous through the weir barrier most of the year. Eg Murray Cod breed on a rising river in Spring. This is also a time of high demand for irrigators. So the release of enough environmental water to push the water over weirs and banks and into billabongs and wetlands would make the best use of this "environmental water". In contrast, "environmental water" sent down the river simply to get to the other end and join the sea, does not have the same environmental benefits.

Weirs in the following locations, according to local elder(both black and white) knowledge would have the maximum environmental benefit for the lowest cost.

1. Ashvale /Para on a rocky base(naturally occurring) with no trees on either side (approx 42- 38 m altitude)

The above 5-6 metre weir would back water up to the Pooncarie weir

2. Pooncarie 57 m above sea level

3. Menindee 67m

4. Old Toorale 102m

5. Bourke 108m

I have a digital mapping model generated by various mapping platforms which is being finalised but is not quite ready for this submission.

In addition many aboriginal friends have expressed the following thoughts. Their signatures can be supplied if required.

1. The river is not owned by anyone. It is part of us and if we disrupt or misuse it we hurt ourselves.
2. Water moving indicates a healthy river. The Murray is NOT healthy as indicated by the Blue Green algae
3. The Darling is NOT dead or even dying.
4. Dams and reservoirs that take from the river system without allowing for sustaining of life "down stream is a form of theft.

There is, according to much research and local knowledge, enough water in the Darling even in drought years to maintain domestic and stock needs, even if irrigation water for permanent plantings is curtailed. Given this fact, the well timed release of environmental water could provide many benefits to the environment and provide water security (both actual and psychological) to all landholders.

Irrigation in the upper Darling could be limited to opportunistic crops like rice or cotton (which is not to everyones liking due to the amount of water used) or instead of cotton a low water demand crop like hemp. Permanent plantings like almonds, citrus and grapes could be limited to areas in the upper Darling as some have suggested. Alternatively a pipeline from Murray weir pool to Pooncarie (one of the pipeline routes originally suggested) going past all irrigators on the West of Darling would capture most permanent plantings and provide domestic and stock water even during long periods of low rainfall in the catchments.

A weir at Menindee and judicious storage in the Lakes system could, as it usually does, provide water to Broken Hill or as some have suggested the new pipeline to Pooncarie could then travel to Broken Hill providing stock and domestic water for landholders and irrigators on the way. Again, opportunistic crops like fodder under irrigation may be best suited in this area, given the likely changes in climate over the next 20-100 years.

The future of water storage in the Menindee Lakes is the subject of divided opinion. However it could be agreed that:

- * the lakes have become an important wetland despite them being man made.
- * recreational use of the lakes is important to the wellbeing of those living in the area.
- * tourism is drawn to the area for this recreational use and this adds to the economy and thus the infrastructure around the local area.
- * the lakes hold a huge amount of water in relatively shallow and broad expanses of water so evaporation is increased here compared to narrower and deeper storages (like the natural river course).
- * evaporation has its own benefits which are often ignored and counted as loss when in fact they contribute to rainfall events
- * the lakes system could be partly storage, partly environmental/wetland and partly recreational depending on water availability and seasonal variation.
- * the lake which is cut off from the Darling, does not contribute to water security in the Darling.
- * the lake system provides water to Broken Hill and the economic stability of that area.

In addition we often hear of the Clarence River and the possibility of gathering flood waters from the heavy rains that cause flooding in Queensland and NSW, near the mountain range. If it is true that this 80 -100km pipeline could add water to the Darling system, then surely a 4 state agreement to fund this would be the first step in creating water security for the Murray Darling system.

Taking water from the Murray River to Broken Hill seems a very false economy. Even if the pipeline provides water to a mine south of Broken Hill and allows for more

water to irrigate huge almond and cotton plantations; this will not make up for the environmental losses along the length of the Darling or the extra strain being placed on the Murray.

Perhaps the following could be considered as a whole of Murray Darling plan

Wentworth to Pooncarie

Low Weir or other environmentally friendly barrier at Ashvale to serve lower Darling to Pooncarie - to utilise Murray weir influence.

Pooncarie to Menindee (Broken Hill)

Rain events (medium and low) allowed to flow into Darling and high intensity rain events fed into Menindee Lakes for water security for Broken Hill and Menindee.

In this case, how many lake are filled may be modified, as it was in past, to allow for Ana Branch, South Australia and Murray Darling flow and the occasional "over the bank" event to allow for flooding of floodplains and billings. Evaporation could be lessened if more water was in river rather than in 4-5 large shallow lakes but it is still environmentally and socially valuable to keep water in Menindee Lakes

Upper Darling

100km pipeline from East to West to contribute to large scale irrigation requirements (and the associated economic benefits) and feed into upper Darling tributaries.

Please consider this submission as a genuine attempt to create a win win for the Murray Darling and all who benefit from her and care for her. I am hopeful the people who benefit are also the people who care.

Written by Jacqui Pasquale
(on behalf of many lower Darling residents)
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