

Dear Sir/Madam

I was previously unaware of the closing date of 11 September. I hope that you can consider a late, but brief submission.

Submission:

SENATE INQUIRY INTO THE URGENT PROVISION OF WATER TO THE COORONG AND LOWER LAKES

There are two ecological factors often overlooked in discussions about water in the Murray-Darling: (1) that water flows vary greatly, with ten-fold variation from year to year; and (2) that it does not matter ecologically if the river does not flow to the sea each year, but it is vital that it floods to the sea periodically. Floods rejuvenate sandbanks and floodplains, and it is the floods, not the base flow, that maintains the ecological character of the Murray-Darling and of the Coorong.

The great variation in river flow means that pumping entitlements expressed absolutely in Gl/year are nonsensical - what seems reasonable in an average year will be excessive in a dry year and conservative in a wet year.

My suggestion is a simple one. Instead of expressing water allocations in absolute terms (eg, Gl/year), they should be expressed in relative terms (eg, percent of available). An authority should estimate the water available in the river system on a monthly basis, and each user would have their entitlement expressed as a proportion of that amount available. This would make it obvious if water was over-allocated. It would mean that upstream users could not remove all the water depriving downstream users of their entitlement.

However, I would add one additional requirement, to allow periodic floods. During droughts, allocations would gradually decline in step with the reduction in availability. During periods when it is more than 10 years since the river has run to the sea, allocations should not increase, even though the overall availability might increase, until a flood has reached the sea. This would help to allow the floods needed to rejuvenate sandbanks and floodplains. Once a flood has passed, allocations could jump up to the prescribed proportion.

These two simple provisions should help to strike the best compromise between ecological flows and demands of water users along the whole river system.

Sincerely

Jerry Vanclay

Prof. Jerry Vanclay, D.Sc.For.
Professor of Sustainable Forestry
Head, School of Environmental Science and Management
Southern Cross University
PO Box 157, Lismore NSW 2480, Australia
Tel +61 2 6620 3147, Fax +61 2 6621 2669
http://www.scu.edu.au/staffdirectory/person_detail.php?person_id=3736

Recent paper:

<http://dx.doi.org/10.1371/journal.pbio.0060166>

Latest book:

<http://shop.earthscan.co.uk/ProductDetails/mcs/productID/74>

5