Submission No 24

INQUIRY INTO FLOODPLAIN HARVESTING

Organisation: River Lakes and Coorong Action Group Inc.

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River Lakes and Coorong Action Group Inc.

Winner 2009 Jill Hudson Environmental Award

Submission to the NSW Upper House Inquiry into Floodplain Harvesting

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The River, Lakes and Coorong Action Group is an independent community organisation with a record of more than 15 years advocacy for the health of the Murray Daring Basin system.

The River is the only stakeholder in our organisation and we advocate for a fair and sustainable allocation of water for the environment and all users.

The River, Lakes and Coorong Action Group welcomed the Water Act of 2007 and supports the Murray Darling Basin Plan. We are hopeful that the original premise of the plan to provide a healthy river system along with sustainable water use will not be subverted in the quest for maximum economic return and short term political gain.

In response to your terms of reference

a. The legality of floodplain harvesting practices.

   NSW Department of Planning Industry and Environment lawyers provided internal advice that, on the balance of probabilities, it would be unlawful to take water via Floodplain Harvesting without an access licence. It would also be unlawful to construct on-farm storages without approvals.

   In 1995 the Murray Darling Basin Ministerial Council introduced the MDB Cap on surface water diversions to protect and enhance riverine environment and protect the rights of water users. Under the Cap Basin state governments must provide data to the MDBA about how much water was *actually* taken each year compared to annual Cap targets. All floodplain harvesting earthworks and volumes diverted should be no greater than 1994 levels and scientifically reviewed.
   Floodplain harvesting does not fit within the Cap on extractions. The amount of water taken out of the system in this way must be measured and regulated.

The practice of harvesting free, unregulated water causes inequalities with other irrigators adhering to law and paying for their water. Although this has been an historical practice it seems the scale and efficiency of overland water take is now extreme and must be regulated.

The impact of diverting large volumes of water from floodplains and the subsequent impacts on the environment and downstream users does not appear to be consistent with the intent of the Water Act.

Floodplains and their flows are vitally important for the ecology of rivers and affect sustainability in the breeding of waterbirds , frogs, microbats, woodland birds, native fish, mussels, yabbies and other invertebrates as well as vegetation health .

First Nations people are adversely affected by the lack of cultural flows, particularly evident in the dire statistics of Indigenous health outcomes in Wilcannia, where the average life expectancy of a male is a mere 37 years. Many factors are at play here, but there is one that can be fixed – flow into the Darling-Baaka. This is more than disgraceful given the tens of thousands of years Indigenous people have cared for the environment with the philosophy " Don't be greedy , only take what you need". What a contrast to the greed evidenced by some floodplain harvesters.

If the current requirements for irrigation are such that extreme floodplain harvesting is necessary , it is probably time to reconsider the sustainability of these agricultural practices , especially considering climate change factors, and return to opportunistic flood plain grazing.

b The Water Regulations Published on 30th April 2021.

The RLCAG supports the disallowance of the Water management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020. The S.A. Murray Darling Commission Report of January 2019, described floodplain harvesting as " one of the most significant threats to water security in the Northern Murray-Darling Basin to both licence holders and downstream states". A water access licence must be mandatory to take water from a water source for the purpose of flood plain harvesting.

All water taken by FPH methods must be measured with Australian standard, 21st century technology involving remote sensing and automatic metering stations. There should be no exceptions at Ministerial discretion.

The RLCAG supports that FPH is licenced, provided that the take is measured accurately , comes under the Cap and that there is no creative arithmetic to expand the SDL to cover historic take. All volumes diverted should be at 1994 levels.

FPH licencing must address unauthorised floodplain harvesting earthworks illegally harvesting water and resist any retrospective "grandfathering" arrangements.

"Hydrological models used for the Murray-Darling Basin assessments and the Northern Basin Assessments only had data for the main channels of rivers. There were no data to test the effects on the floodplain. .So there is insensitivity to the importance of large flows on the floodplain which are critical for ecosystems". (Submission to Murray-Darling Basin Royal Commission Prof. Richard Kingsford Centre for Ecosystem Science, UNSW, Sydney) Modelling needs to be improved to be fit for purpose and tested against actual data with climate change accounted for. Input data needs to be from the last 20 years, not from the past 100 years to better reflect the implications of climate change.

c. How floodplain harvesting can be licensed, regulated, metered and monitored so that it is sustainable and meets the objectives of the Water Management Act 2000 and the Murray Darling Basin Plan.

The amount of water allocated to licences must be within the Cap.

Any floodplain licences must be linked to a specific site and should not be tradable.

Water captured must be subject to the "first flush" principle whereby the first rains of the season are allowed to flow downstream to keep the ecosystem alive. Downstream flows must be protected with flow targets based on environmental, cultural, basic human and agricultural needs and Native title rights.

Downstream flow targets should be set and measured at downstream river gauges, before floodplain harvesting can occur.

There needs to be recognition that water needs to be shared in an equitable fashion and that irrigation is not prioritised over other users. It is worth noting that recent research by Lana Hartwig et al found that only 0.2% of the available surface water in the NSW section of the MDB is owned by Indigenous people, having decreased by 17% in the last 10 years.

Transparency in dealing with floodplain works is important with a publication of a current list of unlawful structures and identification of those that may be rendered lawful under the FPH policy. There needs to be a published time frame for removal of the balance of these illegal structures with effective penalties for non-compliance. All remaining legal structures should be capable of being turned off.

Reporting of volumes of licensed floodplain harvested water needs to be on a minimum annual basis through uniform, Australian standard metering using remote sensing. Metering needs to be tamper proof. The cost of the metering to be paid for by the licence holder.

Carryover should not apply to floodplain harvesting. The water has passed and gone.

Estimates of how much water is taken from floodplains vary, dependent on the source of the data. It is critically important that Flood Plain Harvesting is fully monitored and measured before licences are granted and then access to water only permitted after downstream flow targets are met.

Climate change must be factored in to the provision of floodplain harvesting licences. The status quo of current water usage cannot be maintained in the face of climate change. The future trend is towards hotter, drier conditions with lower inflows. Climate change is one contributor to the reduced flows in the Northern Basin since 2000(MDBA 2018) .Climate change will make the sharing of limited water resources more complex and contested. Reduced water availability, higher temperatures and higher evapotranspiration will require adaptation within the agricultural industry, particularly highly water-dependent irrigation industries. Consideration must be given to a change of crop types , shifting to more drought tolerant or water efficient varieties , shifting where crops are grown and substituting annual crops for permanent plantings.

Maintaining water quality in the face of climate change will be an issue. There seems to be a concentrated focus on water quantity. Lower flows present salinity issues for the Darling. Blue-green algal blooms are becoming more frequent (Joehnk et al 2018) causing significant environmental, economic and social impacts. The mass fish kills in the Darling downstream of Menindee in January 2019 triggered by algal bloom die-offs and low dissolved oxygen, are a clear example of these potential impacts. (Climate change and the Murray-Darling Basin Plan. MDBA discussion paper February 2019)

Floodplain harvesting legislation must ensure there is not over-allocation and over extraction of available water, must be adaptive and driven by the best available science. There is an opportunity here to improve the state of the Darling and tributaries , facilitate connectivity and enable a more equitable use of available water.

Janette Brooks
Secretary
River Lakes and Coorong Action Group