Comments and Feedback on Connectivity Options Paper provided to Connectivity Stakeholder Reference Group (SRG) - Lower Darling Representative – Rachel Strachan

18 December 2021

Dear DPIE Connectivity Water Group,

Thank you for the opportunity to submit comments on the Connectivity Options Paper you provided to the SRG. It is disappointing that we haven't had a chance to critically analyze the Alluvium review of the plan which you regularly alluded to during our three meetings. This may have given us more context and understanding of how you have arrived at the recommendations articulated to the SRG.

An interesting part of this discussion has been what is deemed normal vs extreme vs detrimental. This will look different through each of our eyes. Hopefully we can be prepared for the extreme to prevent detrimental outcomes.

The key requirement of a connectivity policy is a universal acceptance that in dry times the river and its environs must be the highest priority. In terms of use of water, the basic needs of the people and communities along the river must always be a higher priority than irrigation extraction anywhere. It is critical to be able to sanction protection of water from both harvesting and extraction allowing water to enter the rivers at times of need unimpeded.

A failure to embed this principle as 'hard' rules in a connectivity policy and in WSP's will result in a continuation of the 'water wars.' These are of no benefit to anyone and will never be acceptable politically, socially, culturally or environmentally.

**1 Connectivity is a Whole of River Issue.** It is about the northern basin being part of the whole basin. The emphasis should be on managing available flows in dry years.

- A nominal flow at Wilcannia is not a connectivity policy.
- The key issue in managing flow in dry years is to get flow as far as possible.
- Any flow contribution into a dry or stressed system is meaningful. Using terminology such as "meaningful contribution" for flow assessment raises alarms of ambiguity. "Meaningful" has a different meaning to different people. It is not a useful term in this context.
- It may take several small flows to get through the system in dry years flows are frequently incremental.
- The 2015-16 example where three small flows were allowed to be pumped on the basis that each of them individually would not contribute to downstream targets must be challenged.
   Left alone, the cumulative impact would have been a benefit to the river and communities downstream.
- In this context, the reference to 'meaningful contribution' is alarming. It would suggest DPIE are intending to allow irrigation extraction when the system downstream is stressed.

## 2 Water Quality Matters.

- Allowing irrigation extraction upstream when the river is dry or when water quality downstream is toxic will never be acceptable politically, socially, culturally or environmentally.
- Many health issues in children and adults were the direct result of poor water quality in the
  most recent cease flow. These included staph infections, rashes and a few other unusual
  health issues.
- What have DPIE identified as a tipping point where risks escalate to unacceptable levels? Documents provided have the rhetoric of reducing the risk of catastrophic damage. Is there a plan/guideline to be produced to sit within WSP to achieve such outcomes?

## **3 Lessening the Risk of Serious Problems is a Key Component of a Connectivity Policy.** The recent fish kills are relevant here.

- The suggested 195 GL trigger is of concern.
- It should be expressed as a forward period of supply so how many months ahead is the 'cease to supply'?
- We would suggest 18 months.
- It is worth noting that in the last drying phase, the 480 GL NSW control trigger was hit in late November going into what was a hot and dry summer with 304 GL in the top lakes. The fish kills started in the following December (13 months). With this as recent experience, the suggested 195 GL trigger is naïve and must be revised.
- Recent experience with Water NSW indicates their ability to predict 'cease to supply' timeframes is good – so using a 'XX months of supply' framework is feasible and far more realistic in a river management context.

**4 Operational Rules Matter** – these must be clearly understood to allow a reserve figure to be accepted as valid. There must be no ambiguity!

This omission makes any assessment of the validity of a Menindee Reserve figure difficult. No assessment can be valid until issues such as those referred to below are resolved:

- What are the assumptions used in the modelling to determine the Wetherill reserve trigger?
  - o Does this consider only using active storage?
  - Legal status of water to run the Lower Darling is critical, will this be in the form of a conveyance license?
  - You indicate in your report the determination of a 195GL trigger assumes average evaporation but in extreme dry sequences recent experience shows evaporation has been worst on record. Predicted climate change will increase evaporation.
  - o Is pumping from Lake Tandure assumed?
  - o Do releases over Weir 32 cease when reserves are zero? Or is there a reserve kept in storage for Menindee town? If so, what are the intentions and numbers?
  - o What are the individual daily limits over weir 32?
  - o Is there a priority to maintain connectivity through to the Murray confluence?
  - Is the LD restart allowance (60 GL) in addition to this number? How is this accounted for?
  - o Are there restrictions on the use of the Menindee TLM license under such conditions?
  - Locals are advocating for 18-month storage target due to variability of inflow events and the time flows take to arrive at Menindee (2 summers & 1 winter, or 2 winters & 1 summer) – 20 months was historically used for Broken Hill's requirements.
  - o Why is a static number being used and what does it provide for? What are the assumptions related to the time of the year when this reserve trigger is reached?
  - There is no mention of operational requirements when flows from Menindee would cease into the Lower Darling
  - Are Lower Darling HS and GS account balances restricted? And if so, are similar restrictions imposed on tributaries upstream? If not, why not?
  - What alternative arrangements are proposed for domestic and stock requirements along the river?
  - o Are there water quality targets to be met in a restart? If so, what targets? And where?
  - About 90% of Lower Darling irrigation licences are held as environmental licences. Historically, the vast majority of these licences were – in dry years (= NSW Control) – supplied from separated storage in Lake Cawndilla. As a direct consequence of government policy change, these are now expected to be supplied from the lakes Wetherill and Pamamaroo. This is a four-fold increase in supply obligations from the top lakes in dry years.
    - How is this factored into the proposed reserve trigger?
    - What is the impact of this on reserve targets?
    - What is the impact of this on other licence holders?
    - How is this impact managed?

The recent WSP review for the Murray & Lower Darling ignored all LD operational issues. These were – we were told - to be handled in The Menindee Project. These must be addressed as the behaviour of licenses, operational drawdowns, PPMs, drought reserves & the 480/640 rule have just as much consequence as inflows from the Northern Tributaries.

## 5 The Dominance of the Northern Irrigation Lobby in Decision Making

- We constantly hear about lost opportunity for irrigation upstream. Little is said about the
  huge benefit and positive aspects of river connectivity and the benefits to downstream
  communities (stock water, town water, less crime, ambiance of towns, healthy river at
  your doorstep = happy/content people=community well-being. Healthy Rivers Healthy
  Communities)
- There is a massive cost to govt to provide alternative support in dry times water cartage, additional mental & general health needs & increased policing, biosecurity, additional workloads, this list goes on....
- In the context of establishing policy on connectivity, it is appropriate to refer to the recent ICAC Report showing priority being given to upstream commercial interests ahead of legislated obligations under the NSW Water Management Act.
- The early 2021 event management would have failed if there weren't cumulative subsequent rainfall events. Some created flows, some downstream of Bourke wet up the riverbed. These subsequent events made early forecasts and decisions to appear as overly conservative but this judgement is only possible with hindsight.
- Those of us downstream of Bourke have an expectation that every decision in the context of flow management in dry seasons puts the interests of the river and the communities downstream first. This is clearly articulated in the NSW Water Act and must be observed. The Darling River is for all to share in a way that future generations along its entire length will benefit from its care by us. If government continues to view the Barwon/Darling River to Bourke primarily as an irrigation canal while ignoring healthy river connectivity to Wentworth it will have failed society. We must not let this happen.

We look forward to the Darling River no longer ending at Wilcannia, which is what the current resumption of flow rules has legislated ignoring the need for Menindee storage targets and Lower Darling flow targets to underpin priorities of use provisions under the Water Management Act. Connectivity between water sources for the length of the river should be achieved before extractions for irrigation are allowed. That includes in the northern rivers, Barwon-Darling and Lower Darling

It is assuring that DPIE's water role is to ensure sustainable, secure and healthy water resources and services for NSW. Given our experiences over the past two decades, it is the extremes where protection is critically needed to be articulated and enforceable within WSPs. The Northwest Flow policy using 324 water orders is a component of the solution. Embedding connectivity into the states WSPs is essential.

Kind Regards

Rachel Strachan

Lower Darling Representative Connectivity Stakeholder Reference Group