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Submission from: The Upper Murrumbidgee Catchment Network

Submission to: Productivity Commission Murray Darling Basin Plan Implementation Review 2023

The Upper Murrumbidgee Catchment Network

The Upper Murrumbidgee Catchment Network (UMCN) is a strong and diverse community-based network of individuals and agency/group representatives taking a coordinated approach to creating quality natural resource management (NRM) outcomes for the Upper Murrumbidgee Catchment. The UMCN (and its predecessor organisation, the Upper Murrumbidgee Catchment Coordinating Committee) has been operating for three decades, in recognition that NRM issues do not stop at State or Council boundaries. The UMCN values knowledge sharing, networking, collaboration and inclusion, and is the regional leader in facilitating communication between the community, NGOs and government agencies.

The UMCN takes an integrated system-scale approach to the Upper Murrumbidgee catchment. This includes considering the complex interactions between activities on the land and water quantity/quality, surface water and groundwater, and the range of different uses for economic, social, environmental and cultural purposes. Water quality and management issues are a focus for the network and our work in this area can be seen on our website (umcn.org.au).

We strongly support the ongoing implementation of the Basin Plan, however we have concerns for the Plan's effectiveness in the Upper Murrumbidgee River

The Murray-Darling Basin Plan (hereafter referred to as the Basin Plan) provides for the integrated management of water resources of the Murray-Darling Basin in ways that promote the objectives of the Commonwealth Water Act, 2007 (hereafter referred to as the Water Act, 2007), including the objectives of optimising social, cultural, economic and environmental outcomes. The UMCN supports the ongoing implementation of the Basin Plan, although we do have concerns that for the Upper Murrumbidgee River, and other rivers which fall under governance arrangement of the Snowy Hydro Scheme, for which the Basin Plan has seen little-to-no improvement in these areas, and under current arrangements, never will.

Our main concern is that the outcomes sought by the Water ACT, 2007 via the Basin Plan are unachievable for the Upper Murrumbidgee River due to the fact that management arrangements for the river are largely directed by the operations of the Snowy Hydro Scheme. The requirement of the Water Act that the Basin Plan should not be inconsistent with the operations of the Snowy Hydro Scheme, means that despite the Upper Murrumbidgee River having been substantially modified, it has remained relatively untouched by the water reforms in NSW and the broader Murray-Darling

Basin. Instead, the upper Murrumbidgee, (as well as the Snowy and the other Montane rivers included in the operations of the Snowy Hydro Scheme) are operated almost entirely for economic and energy purposes, severely impacting river health, cultural connection and critical human water needs. As a result, these rivers have been left behind by the progress which the water reforms have afforded to waterways elsewhere.

The situation for the upper Murrumbidgee River is getting critical

This situation is now getting critical. When the upper Murrumbidgee River (above Burrinjuck Dam) ceased to flow during the summer of 2019-20, this was a major red flag for communities all along the river. Many of our members are keen to understand why this occurred, why releases from Tantangara Dam were not effective during dry periods, are confounded at the declined state of our river's health, and are grappling to understand the extremely complex administrative arrangements across multiple jurisdictions and how the situation can be improved.

The Snowy Hydro Scheme today captures more than 90 percent of average inflows to Tantangara Dam, diverting this water inland and away from the Upper Murrumbidgee River. Natural pre-dam inflows are estimated to have averaged 260-300 gigalitres per year, but the total release over the ten years to 2022 summed to only 179 gigalitres. Figure 1 illustrates the substantial reduction of flows resulting from the construction of Tantangara Dam along with the impacts of recent Millenium and 2017-19 droughts.

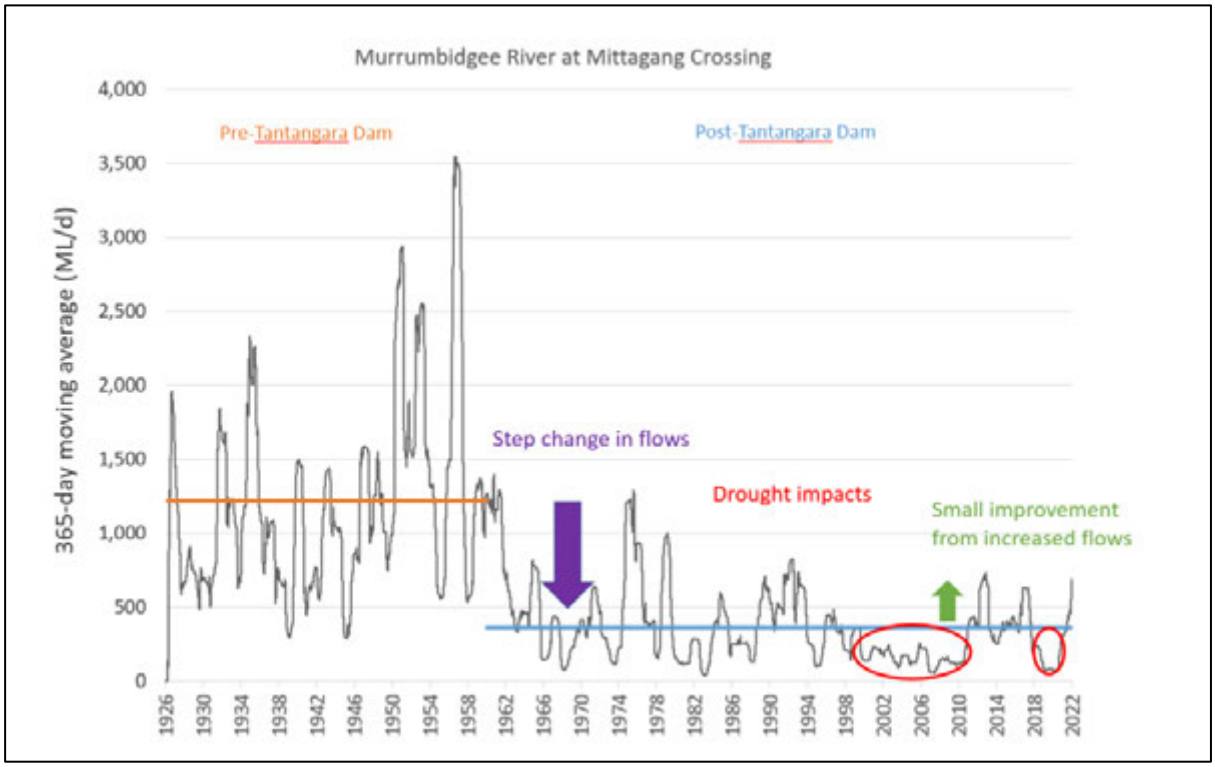

Figure 1. Flows in the Upper Murrumbidgee River at Mittagang Crossing pre and post construction of Tantangara dam, noting the severe flow depletion experienced during drought periods.

The most recent drought demonstrates that the river is highly vulnerable to the low volume of environmental water available for the Upper Murrumbidgee River, the low allocations within this

volume, and the lack of protection of these flows once released. This has resulted in a range of social, cultural and ecological impacts on the Upper Murrumbidgee River, including:

- Ecosystem health rated in very poor condition, with the fish community rated as poor to extremely poor (Sustainable Rivers Audit 2008).
- Significant sand slugs creating barriers to connectivity and reducing habitat for a range of species, including fish and platypus. During the most recent drought there were anecdotal reports of Murray cod deaths where fish were unable to access refuge habitat.
- Periodic flushing flows are infrequent and totally ineffective in some reaches downstream of the dam, meaning that sediment and bacteria cannot be cleaned out.

Despite this, the river still retains areas of high ecological significance, with critical aquatic habitat for several nationally threatened species, including Macquarie Perch and Murray Cod.

One of our member organisations, the Australian River Restoration River Centre, has developed a website which outlines how current management arrangements are impacting on the health of the Upper Murrumbidgee River (theforgottenriver.au).

Current management arrangements are detrimentally affecting the health of our river

Existing operations of Tantangara Dam and are affecting the health of the river. The trade-off for how much environmental water should be allocated to the Snowy and Montaine Rivers was made in the late 1990s, reflected in the Snowy Water Inquiry Outcomes Implementation Deed (SWIOID) in 2002, and enacted through the NSW Water Licence for Snowy Hydro.

The Explanatory Memorandum for the Water Act 2007 *"requires the Basin Plan to not be inconsistent with the licence issued under the Snowy Hydro Corporatisation Act 1997 of New South Wales."*

With the Snowy Scheme effectively 'sitting outside' the water management framework, the parts of the Murray-Darling Basin affected by these rules are essentially locked within the rules set by the SWIOID in 2002, and which have not been reviewed since. This has resulted in a situation where the rest of the Murray-Darling Basin has a focus on protecting and restoring aquatic ecosystems through the use of environmental water under principles which include active and adaptive management, community and First Nations engagement, the use of best available science and best practice, while at the same time, our upland rivers are stuck within rules and trade-offs made in 2002.

The Upper Murrumbidgee is also classed as 'unregulated' in the NSW Water Sharing Plan, despite approximately 90% of its headwater flows being captured and as much as 99% in dry years. As a result, environmental flows released from Tantangara Dam become part of the available 'unregulated' water source and so are legally able to be extracted by downstream water users. Furthermore, this water can be substituted for Cooma's water supply as there remains ambiguity about whether riparian/baseline flow allocations can be afforded from the environmental flow allocation. We do acknowledge recent work by the NSW government in seeking to protect environmental flows in future, but note that this is still in progress.

There is no easy process to improve this situation, as the rules which underpin the Snowy Water License (which regulates Snowy Hydro's operations) have not been reviewed and are not scheduled to be reviewed despite being over 20 years old. This means that everything we've learned about best practice river management can't be applied to the Upper Murrumbidgee, Snowy or other Montane rivers. When there was an opportunity to review the Snowy Water License itself in 2017 (which occurs once every 10 years), town water supply and the volumes of water available to the environment were ruled out of scope, with no obvious reason as to why this would be the case.

The rules which govern environmental water management in the Upper Murrumbidgee River are out of date. There is no opportunity for carry-over, very limited-to-almost no active or adaptive management, the allocations are based on previous water year in-flows (out of sync with natural cues) and water use is traded-off against other Montane rivers (impacting one river by taking flows to try and help another river). The latter arises because unlike Tantangara Dam, the structures allowing flows to be provided to the other Montane rivers are weir systems, meaning they are either 'on' or 'off'. This means that in dryer times, decisions must be made as to which rivers will receive any water while others do not, and the Upper Murrumbidgee can be the last river to be considered.

We would like agencies to work more closely with the community to help us look after our river

We acknowledge that management arrangements are complex, and that there are a number of agencies and mechanisms involved that have various levels of intersectional responsibility in regard to these matters. The result is that under current arrangements and between all these agencies and mechanisms in place, the Upper Murrumbidgee River is falling through the cracks and continues to decline. We ask that these issues are acknowledged by the Productivity Commission and the impacts of the current management arrangements are noted.

We also note that community engagement from Federal agencies has largely missed the ACT and surrounding region, even though Canberra is the largest city within the Basin. This means that our community is trying to get up to speed on how it all works (WRPs, WSPs, LTWPs, BWEWS, water recovery projects etc.), while also trying to engage in consultation processes which take part elsewhere in the Basin. This makes it difficult for our community to have input into consultation processes, discuss issues with relevant agencies and access opportunities to work together to find solutions on issues raised.

As a community we are certain that there are in fact steps that could be taken if we are open to working together at all levels and considering innovative solutions. In the UMCN's recent submission to the Water Recovery Consultation (DCCEEW), we highlighted options including releasing operational flows for the Murrumbidgee River system from Tantangara to Burrinjuck.

With our region facing increased population growth and the challenges of climate change, we feel that now is the time to review the rules which govern the Upper Murrumbidgee and other Snowy-Montane Rivers. Our community is not asking to make a good river better, we are calling on relevant government agencies to act to prevent the Upper Murrumbidgee River from suffering irrevocable decline.

Thank you for the opportunity to provide input to this process.

Kind regards,

Andy Lowes

Chair
Upper Murrumbidgee Catchment Network, for and on behalf of the Upper Murrumbidgee Catchment Network Executive Committee.