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Natural Resource Commission GPO Box 5341, Sydney, NSW 2001

Re: Submission of comment on the Murrumbidgee Water Sharing Plan

Dear Sir/Madam

I am writing on behalf of the Upper Murrumbidgee Demonstration Reach (UMDR) partnership to provide comment on the Murrumbidgee Water Sharing Plan.

The UMDR is a regional partnership which aims to involve all catchment stakeholders in working together to improve and protect the health of the upper Murrumbidgee River for the benefit of native fish populations and the community. Key partners of the UMDR include Bush Heritage Australia, the Australian River Restoration Centre, Upper Murrumbidgee Waterwatch, the ACT Government and the University of Canberra. Our work is supported by Local Land Services, NSW Fisheries and the Murray-Darling Basin Authority in recognition that our work contributes towards the key outcomes which these organisations also seek. Our priorities include protecting and restoring riparian habitat, willow and Box elder control, mitigating erosion, improving instream habitat and connectivity, supporting better flow management, as well as community engagement, capacity building and raising awareness within our catchment community to foster strong river stewardship into the future. The UMDR is a member of the Upper Murrumbidgee Catchment Network (UMCN). The UMCN is a community-based network of individuals and representatives from agencies and groups taking a coordinated approach to creating quality natural resource management outcomes for the Upper Murrumbidgee Catchment.

The upper Murrumbidgee River is iconic- it is the headwaters of Australia's second longest river, it is home to 9 species of native fish (including natural, self-sustaining populations of Macquarie perch and Murray cod which are both nationally listed threatened species), is culturally significant to the Ngarigo and Ngunnawal peoples, and is relied on by our rural and regional communities for irrigation, recreation and as the source water supply for Cooma (the home of Snowy Hydro) and Canberra (our Nation's capital). All of these important ecological, social and economic values of the upper Murrumbidgee are underpinned by good river health.

Currently, the health of the upper Murrumbidgee River is regarded as poor and this underpins the urgency and importance of efforts to protect and improve it. A key factor affecting the health of the upper Murrumbidgee River is reduced flows, as more than 90% of headwater flows are diverted at Tantangara Dam as part of the Snowy Hydro Scheme (SHS). The ecological impacts of reduced flows include increased sedimentation of breeding and refuge habitat for threatened fish and other riverine species, impairment of ecological cues and reduced riverine connectivity allowing movement to complete essential life stages. In recent years high bacterial levels and blue green algal blooms occurring in the upper Murrumbidgee has seen the river having to be closed for recreational use in Canberra.

as well as impacting rural and regional water supplies, highlighting the relationship between flows, river health and water quality.

Given the river's current state of health, the upper Murrumbidgee's environmental flow regime (released from Tantangara Dam) is critical to maintaining and improving the river and its species. This flow regime was established as part of the Snowy Water Initiative (SWI) and is mandated in the Snowy Water Initiative Operations and Implementation Deed (SWIOID). The SWIOID is a legal agreement signed by the NSW, Victorian and Commonwealth governments to ensure that the SWI releases would (i) protect endangered/threatened species, (ii) maintain natural habitats and (iii) maintain wilderness and national parks values. Additionally, the NSW, Victorian and Commonwealth governments invested a huge amount of money (\$1.2 billion) to improve the environmental outcomes from the SWI which aimed to restore the health of the eastern flowing and montane rivers affected by the SHS.

One critical issue that undermines the outcomes sought by and investment in the SWI is that environmental releases from Tantangara Dam are allowed to be extracted downstream. The existing commence to pump flow triggers in the water sharing plan only protect base flows. The additional releases made possible by the SWI can be extracted by irrigators because the fixed flow triggers are blind to the source of water. As a signatory of the SWIOID, the NSW government has an obligation to protect such Snowy Montane releases downstream to achieve its intended purpose to improve river health in the upper Murrumbidgee River. NSW has an added responsibility to address such issues under sections 5 and 9 of the Water Management Act which refers to the priority of the water source and dependent ecosystems.

Future pressures are likely to exacerbate the situation. Climate change will lead to an overall reduction in flows, coupled with an increase in water demand as our region continues to grow. Other compounding issues are a lack of on-ground compliance and critical knowledge gaps which are hampering better flow management decisions.

During a recent drought in 2018-2020 in the upper Murrumbidgee, the river ceased flowing completely for long periods at a time. These impacts are likely to have been exacerbated by unlawful extraction by irrigators, undermining critical human needs to the detriment of downstream townships and riparian water users. These claims are thought to have occurred in preparation for an imminent fire threat during the black summer bushfires.

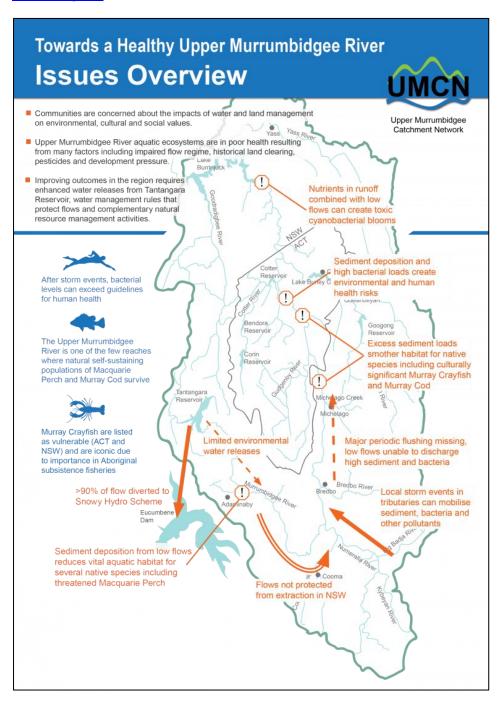
In the last years we have also been increasingly experiencing episodes of high bacterial contamination in the upper Murrumbidgee resulting in the river being closed off for recreational use in the ACT, as well as algal blooms affecting riparian water users. As we know from other parts of the Murray-Darling Basin these events can also be associated with mass fish kills and we hold concern for this in the future.

Our catchment's stakeholders also hold a high level of concern about the health of the upper Murrumbidgee River and the lack of protections in place to protect environmental water, which is so essential to supporting a healthy functioning ecosystem. Below are some examples of where this concern is documented.

The Finterest website provides a summary of the 'fish and flows' forum hosted by the UMDR which sought to bring a wide range of stakeholders together, share knowledge about management issues facing the upper Murrumbidgee and discuss opportunities for addressing them. Reductions in flows and lack of protections for flows were raised as major

issues of concern. See https://finterest.com.au/upper-murrumbidgee-recovery-reach-fish-and-flows-forum/

The UMCN recently conducted an online survey which asked members and associates about their understanding of and concerns around Water Quality and Security in the Upper Murrumbidgee Catchment. Water for the environment, river health and biodiversity, and climate change were the top three areas of concern. The full survey summary can be read here: Water Quality and Security Survey – Upper Murrumbidgee Catchment Network (umcn.org.au)



The above infographic was prepared by the UMCN to raise awareness about the major issues affecting the health of the upper Murrumbidgee River in response to concerns raised

by its members and associates. It can be found at: https://umcn.org.au/towards-a-healthy-upper-murrumbidgee-river/

The catchment community's concern is mirrored by the fact that the Snowy Stakeholder Advisory Committee made the recommendation that no environmental flows be released during the summer months of the 2021-2022 water year specifically so environmental flows could not be extracted because this is the time when natural flows are lowest and water demand is highest.

We therefore ask the NSW Government to put in place protections for environmental water releases in the upper Murrumbidgee River as an immediate priority. We note, and are afforded hope by, the precedents already set in NSW for the protection of more 'actively managed' environmental flows in unregulated river such as the Barwon-Darling, Lower Macquarie and Lower Gwydir River systems. We also ask that the NSW Government support stronger compliance efforts and assist to address critical knowledge gaps needed to enable more sustainable flow management to maintain and improve the health of the upper Murrumbidgee River on which our region and Nations' capital relies.

Yours sincerely,

Antia Brademann

UMDR Facilitator

6 Feb 2022