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30 June 2023

Submission from: The Upper Murrumbidgee Catchment Network

To the: **Australian Government Department of Climate Change, Energy, the Environment and Water's Strategic Water Purchasing Consultation**

Dear Sir/Madam,

The Upper Murrumbidgee Catchment Network (UMCN) is writing to make comment on the Australian Government Department of Climate Change, Energy, the Environment and Water's Strategic Water Purchasing Consultation.

The 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. In this context the influence of current water management arrangements on the health of the Upper Murrumbidgee River is an issue of concern for the UMCN.

The Water Act 2007 (Cth) and Murray-Darling Basin Plan 2012 (Cth) requires water recovery to bridge the gap to the Sustainable Diversion Limits (SDLs). A total of 46 GL of surface water and 3.2 GL of groundwater still needs to be recovered across seven catchments within the Basin to achieve the SDLs (noting that the final volume left to be recovered is subject to change pending the finalisation of all outstanding Water Resource Plans in New South Wales). Environmental water recovery is a key factor which supports restoring the Murray-Darling Basin environment to health, while delivering positive outcomes for the economy and for Basin communities.

We note that this consultation provides the opportunity to formally contribute ideas to delivering the Basin Plan's 450 GL water recovery target and to supplement estimated shortfalls in gap bridging water efficiency projects.

Our submission speaks to water issues and concerns in the Upper Murrumbidgee River catchment, which includes the ACT (one of the catchments where water recovery is targeted), as well as the mainstem of the upper Murrumbidgee River upstream of the ACT. Although the latter is not included in the seven catchments, we are asking it to be considered by the current consultation on ideas for the 450 GL water recovery target, as to date, and despite the Upper Murrumbidgee River having been

substantially modified, it has remained relatively untouched by the current water reforms. More information can be found at https://theforgottenriver.au/.

The lack of reform means our region's critical human water needs and the cultural and ecological values of the Upper Murrumbidgee River (the very outcomes sought by the Water Act and the Murray-Darling Basin Plan) are increasingly under threat. This was highlighted in the summer of 2019-20 when the river ceased to flow, and this was a major red flag for communities all along the river. There is deep concern amongst our membership that climate change will only exacerbate this issue and hence, prompt action is required.

This submission emphasises that **we are not asking to make a good river better, we are asking for a river in poor and declining condition to be recovered in line with expectations under the Water Act.** Currently the upper Murrumbidgee receives only 1-10% of its headwater inflows and this is impacting the ability of the river to maintain its health and to keep on delivering positive outcomes for our region. This can be rectified by increasing flows to at least 21%, which is in line with flows intended to be restored to support the health of the Snowy River, which was similarly impacted by the Snowy Hydro Scheme. Restoring this level of flow to the upper Murrumbidgee River was one of the points made by the Upper Murrumbidgee Catchment Coordinating Committee (the UMCN's previous name) submission to the 1998 Snowy Water Inquiry.

Given the complexities of water management in the Upper Murrumbidgee we acknowledge that forming a pathway forward is not easy, but the risks of not doing so will have far reaching implications. We are calling on the Federal water reforms to address these issues. We therefore ask that the concerns and suggestions raised in this submission be reviewed as part of the current consultation and be incorporated as part of actions to recover water which support river health outcomes under the Strategic Water Purchasing Framework.

We're also hoping to flag the key issue that water is a key, yet limiting resource required for the ACT and region to grow; however the options for further water capture in the ACT are limited. As Canberra's population increases, like the nearby development of Googong, it may need to recycle its water, resulting in less treated water to the Murrumbidgee, and hence the Murray-Darling Basin. The call upon water from centres such as Bungendore, Sutton, Murrumbateman and Yass have also been on the agenda for a long time and this is a growing expectation. According the ACT and Sub Region Planning Strategy, a comprehensive review relating to the future capacity for growth, the limits to growth in our region is governed by water supply, which could be looking to support a population up to 700,000 by 2050. Predicted figures may be impacted by the uncertainties of climate change and highlights the importance of knowing the larger context of water resource management in our region, and planning for it now.

Some options that we think are worthy of consideration and relevant to the objectives of the current consultation include:

Option 1 - Increasing the 'Increased Flows' allocated to the Upper Murrumbidgee River from the current rate of approximately 1-10% of inflows, to 21% of inflows, while also guaranteeing no reduction in flows to other Montane Rivers, to avoid recovering the Murrumbidgee River at the expense of other rivers. We note that 21% of pre-Snowy Scheme flows is what the Snowy River was scheduled to receive following the Snowy Water Inquiry, while the upper Murrumbidgee River only receives around 1-10% or pre Snowy Scheme flows. This could require in the order of 26-55GL/year, resulting in only an approximate loss of 3% reduction of Snowy Tumut releases.

Option 2 - Creating an entitlement to be held by the Commonwealth Environmental Water Holder which bridges the gap between Snowy Montane Rivers Increased Flows (SMIRF) allocated to the Murrumbidgee River and 21% of inflows (without compromising flows which are given to the other

Montane Rivers). This water could then be protected into the Murrumbidgee regulated system (via Burrinjuck Dam), and then into the Murray system through to the Murray Mouth, directly contributing to the 450GL Basin Plan water target, including off-setting water recovery from the ACT and meeting the recovery requirement of 4.9GL. Importantly this will also allow environmental water for the upper Murrumbidgee to be managed in-line with the rest of the Murray-Darling Basin.

Option 3 - Delivering operational water via the Upper Murrumbidgee River by either:

a) Having a percentage of in-flows delivered through Tantangara Dam as Planned Environmental Water which becomes re-allocated when it arrives in Burrinjuck, with environmental equivalent contributing to the Murray-Darling Basin Plan as a Sustainable Diversion Limit Adjustment Mechanism Project under the SDLAM Program.
b) Setting a volume range to be delivered to Burrinjuck Dam within a given year in addition to SMRIF. This could be 10-15% of inflows, with the water re-regulated in Burrinjuck Dam and the environmental benefit contributing to the Murray-Darling Basin Plan as a Sustainable Diversion Limit Adjustment Mechanism Project under the SDLAM Program.

Option 4 - Establishment of a food and fodder drought reserve of 15-20GL in Tantangara Dam to be accessed in extreme drought and routed via the Upper Murrumbidgee River, with environmental equivalent contributing to SDLAM program. During the recent 2017-19 drought, agencies explored options in the Murray-Darling Basin to provide water for fodder and the only obvious solution identified was to switch on South Australia's desalination plant. Having a drought reserve of water in a more central part of the Basin (Murrumbidgee irrigation districts) would provide another option for fodder for central and northern NSW and southern Queensland; areas hit hard by drought in 2019. This water could be reserved for General Security Licenses to grow cereals and fodder for food security and for stock management survival during drought. This could be implemented by regulating the flows between Tantangara Dam and Eucumbene Dam (ie keeping more water in Tantangara) and may also benefit the operations of Snowy 2.0.

Option 5 – Explore options for releases into the Upper Murrumbidgee as a result of Snowy Hydro 2.0. With the Snowy 2.0 project underway, the community is keen to learn and discuss how operations can be optimised for energy production and river restoration including through the use of Required Annual Releases in different ways and operating Tantangara at a higher storage capacity than what it has been historically. It is obviously early days, but providing a forum where agency and community perspectives on water, energy, finance, culture, environment and social values can all be considered in the context of opportunities provided by Snowy 2.0 operations, could uncover a range of win-win outcomes. We just need a forum and appetite to bring all these perspectives together.

Option 6 - a combination of multiple of the above options.

The UMCN recognises that the above options may require trade-offs in regard to power generation in the context of the Snowy Hydro Scheme. Specifically, there is a loss of electricity generation opportunity whenever water is released from Tantangara Dam, however this could be rectified by adding power generation capacity to the dam, or exploring further wind and solar projects. In addition, it should also be factored in that power is generated from the turbine at Burrinjuck Dam, so total lost energy potential at Tantangara doesn't consider energy generated at Burrinjuck.

In regard to foregone electricity generation, we do note that to increasing Upper Murrumbidgee River flows to 21% could represent only approximately a 3% reduction of flows through Snowy-Tumut power generator. We also suggest that the operation of Snowy 2.0 at Tantangara Dam is an opportunity to reduce overall net losses. Additionally, losses due to foregone electricity generation could be recouped through investing in complementary wind and solar generation projects. We believe that these options

should now be considered as part of the overall context in which reforms to water management arrangements in the upper Murrumbidgee can be made. To date, energy needs has put a stop to any conversations about these options, but as we explore all avenues to implement the Murray Darling Basin plan, there is a need to consider options in this part of the system and create a forum where all parties can meet to discuss these ideas.

Notwithstanding the above, there is also the option to accept reduced revenue from power generation. As the Commonwealth Government is the sole shareholder of Snowy Hydro Ltd, there is a case to be made for a trade-off where reduced revenue from power generation allows for important gains to be made in supporting critical human water needs for our region, and the need to have a better balance across social, cultural and environmental outcomes through the water reform process. In saying this and as aforementioned, future arrangements can now take advantage of opportunities presented via Snowy 2.0 and future alternative renewable energy options, as these remove the constraints (foregone electricity generation) under which previous water management arrangements were made.

In terms of regional electricity security more broadly there are many other opportunities for compensatory electricity generation in our region, although these are not all under the remit of Snowy Hydro Ltd. These include from Tantangara (if fitted with infrastructure), Burrinjuck and Googong dams, and also via mini generators on Jindabyne and Jounama dams. The ACT has the Stromlo Mini Hydro and perhaps there are options to generate electricity from ACT water supply dams if these were developed. Such added electricity supply would certainly benefit the region and would complement measures by the ACT to meet its gap requirements by releasing additional water to the Murrumbidgee River. From the UMCN's perspective, future water and energy decision making needs to take a more holistic and integrated approach across our region and the above factors would all be valuable to take into account.

We believe that **the option to take no action is not an option and will severely compromise our Nation's Capital and region** via:

- continued threat to critical human water needs in the Nation's capital and region, including service shortfalls and costs to freight water to properties in drought;
- continued poor water quality for communities such as Cooma and the ACT, including increased costs to Cooma to treat poor quality water (currently not costed into trade-off decisions);
- continued impact on First Nations who increasingly raise concerns about impacts to cultural sites, songlines, stories, species and wellbeing;
- continued loss of species including EPBC listed species such as Macquarie perch and Trout cod, as well as Murray river crayfish, turtles, platypus, Rakali and Two-spined blackfish. It is important to note that Silver perch are already considered extinct in this stretch of the river and there are concerns for Two-spined blackfish, Murray river crayfish and Golden perch;
- continued and increased loss of amenity and recreation for communities including the ACT resulting from river closures due to high bacterial and algal loads - and the socio-economic costs and loss of ecosystem services which result from this;
- loss of resource to aid in severe bushfires, noting that the river provided a vital water source for communities and agencies during the 2019-20 black summer fires; and
- limiting sustainable future growth in our Nation's capital and the region which supports it.

Additionally, we raise concerns that there is no obvious forum to have these conversations which encompass the ACT and Region's water needs, the environment, Cultural considerations, water, power generation and finance. We also suggest that since the Water Act commenced in 2007 and the Murray-Darling Basin Plan in 2012, the ACT community has hardly ever been directly consulted on water management issues by the Commonwealth Department of the Environment and Water (operating under various different names over the past 15 years), the Murray-Darling Basin Authority, or more

recently, the Productivity Commission. This is despite the fact that we have over the years submitted submissions to various processes which have highlighted the issues we face.

The irony is that all the above agencies are largely based here in Canberra working on supporting a more sustainable Murray-Darling Basin, and yet we have a river in such poor condition. The latest process being run by the Productivity Commission to review Murray-Darling Basin Plan implementation is yet another example, where the closest forum available for the ACT and surrounding region to participate and raise these issues is Griffith. The potential solutions we're exploring are very complicated, and having a forum where we can have all the expertise available to discuss these options is critical, yet currently missing.

The Upper Murrumbidgee community is being offered the opportunity to comment on water recovery, Sustainable Diversion Limits, Basin Plan implementation, but the question remains, how literate is our community on these matters? From the Federal level, who has come and explained to the ACT community that our region has a gap in water recovery, how it was calculated and what the implications are? This means that the community is trying to learn what we're making a submission about, while trying to participate in the process. So if our ideas above seem 'not possible', perhaps the follow-up question is, why not, and who's role is it to come and explain why?

We therefore ask that the ACT and regional community be included and more deeply engaged in Murray-Darling Basin conversations, so we can discuss these issues and options more fully and in the interest of our sustainable future. Specifically, we would like locally based opportunities for the ACT and region community to discuss our needs and how these can be supported by the Federal water reforms, while also exploring contributions to water recovery targets.

Given the risks and challenges our region faces, we again ask that the concerns and suggestions raised in this submission be reviewed as part of the current consultation, that they be incorporated into actions to implement water recovery for a sustainable Murray-Darling Basin under the Strategic Water Purchasing Framework, and that the issues raised in this submission are referred through the Federal government agencies as appropriate.

We welcome further discussion and exploration of these options with all relevant parties.

Kind regards,

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