ABN: 53 974 240 329

13th October 2024

To: Commissioners and Executive Director
Natural Resources Commission
NSW Government
By email: nrc@nrc.nsw.gov.au

Re Submission re Draft Water Sharing Plans for the Unregulated Macleay River and its sub-catchments.

Dear Sir/Madam,

Save Our Macleay River Inc. (SOMR) is a community group working with all levels of Government and industry, with the objective: 'To work towards ensuring clean water and healthy environment throughout the Macleay River catchment.' Its Committee and Members comprise and represent the community in all parts of the large Macleay catchment, with varied expertise.

We thank you and appreciate your making available and exhibiting the Draft Water Sharing Plan, specifically for the Macleay and the opportunity to provide this brief 'Have your Say' Submission. Our concerns about the impact of recent developments on the flow of the river are based on observations and do not answer all the general key questions posed on the Natural Resources Commission's website, as we have only recently learned of the exhibited draft plans for comment, and it is difficult for us to fully comprehend the complexity of the plans content & implications.

Our points mainly address Question 6, *What changes do you think are needed to the water sharing plan to improve outcomes?*

Main Concerns of the Water Sharing Plans:

Our main concern relates to the lack of consideration given to current up-stream water up—take and storage developments impacting the downstream environment and water users in the 2016 Water Sharing Plan.

These developments, since 2016, impacting downstream users on the Macleay River dominantly include:

- **Oaky and Malpas Dams:** Armidale Regional Council's (ARC) "ambitious employment and population growth targets" require as vital components the purchase and restoration of the Oaky Dam and the raising of the Malpas Dam wall by 6.5m to provide for region's ambitious water supply strategy.
- **Water intensive horticulture in the Armidale region:** ARC's growth strategy also includes support for the expansion of horticultural crops with increased irrigation demands.
- **Oven Mountain Pumped Hydro Storage Scheme:** According to the EIS presented by the proponents of the scheme, the "water take for the initial storage fill (6,500 megalitres (ML) represents 1% of the average annual streamflow volume in the Macleay River adjacent to the Project area. Extraction for the initial storage fill and operational top-up will occur at a rate of up to 86.4 megalitres per day (ML/day) which results in a maximum streamflow reduction of 12.6% for short periods (several hours), equivalent to an approximate 5% reduction in streamflow depth at the extraction point. The initial storage fill is a one-off take and will occur for a relatively short period of time (i.e. 3–12 months) while the periodic operational top-up is predicted to occur infrequently." Additionally; their 'Construction' water uptake has been amended from 1 to 3 ML/day, over a 4–5year construction period.

Questions need to be asked about the accuracy of the stream flow data, pumping times and top-up needs in the granting of these new OMPHS project water access licences and downstream impacts need to be addressed. – Note: The proposal's EIS and DA has taken flows from Georges River (100Km^2) which is downstream from the site, boosting their flows in the DA.

The above three major developments will have significant impact on Macleay River flow as they eventuate and their impact, along with lesser 'takes' and losses, will have cumulative impacts on the flow/uptake figures presented in the WSPs. - SOMR is not only concerned about the quantity of water for users, society, cultural and environmental flows, but also the water quality; especially from Intensive Horticulture developments. – Which the plans do not consider; but if the water is polluted/contaminated it is not much use.

Administration of the Water Sharing Plans:

When the Catchment Management Authority was dissolved, (after the CMCs and CMBs) the tasks were supposedly handed over and integrated into the then new LLS and it is noticed that in section 7.0 it says *"DPI Water is responsible for implementing the WMA 2000, including developing water sharing plans for the state's water resources. DPI Water established several interagency panels to assist with the development of water planning policies and water sharing plans. The preparation of the Macleay River water sharing plan was guided by three panels:*

- *State Interagency Panel*
- *North Coast Working Group*
- *North Coast Interagency Regional Panel (IRP)."*

And then: in 7.2 North Coast Interagency Regional Panel
The North Coast Interagency Regional Panel (the Regional Panel) comprises representatives from DPI (Water, Fisheries and Agriculture), OEH (now DCCEEW), and the North Coast LLS (formerly Northern Rivers Catchment Management Authority) is now merely an observer.

Considering the importance of having a single organisation managing and monitoring the whole of the catchment; the agency with the responsibilities of the dissolved Catchment Management Authority. Why is the LLS is only given observer status. It is not known what LLS is really doing about the catchment, but as they have the role, they should surely have full member status fort the North Coast Interagency Panel.

Allied to this; is the need for local knowledge and localised monitoring which the LLS have the capacity for, rather than a centralised State DPI Water, despite the North Coast based group and panel representation.

Water Sharing:

The WSPs consider large water users with big pumps to have digital meters to work out water extraction. It is considered these would be relatively low in number; whereas there would be many small-pump users, which would account for a large proportion of the extractions along with other losses.

Naturally, there is little concern, or need, to extract water when rain wetted soils, run-off and flows are high. It is in dry and drought periods with low run-off when the water uptake is needed and the river comes under stress for users, society, cultural and environmental requirements. This is when water will likely be reduced to shrinking pools, evaporation, heat toxicity take effect; and the sharing needs to be appropriately allocated and varied as needed for all these essential functions. In drought periods past Kempsey's dependence on the river supply was highlighted. It is understood some WSPs elsewhere have started to require a low flows be left in rivers and sub-catchments and the suspension of licences in the Macleay catchments should be required in times of low-flow.

From adding up the "shares" of what is allowed to be extracted; it is noted that town water supplies are currently permitted to take adds up to 50.9% of the total of long-term average extraction limits (Kempsey, more than Armidale + Guyra). The amount that can be taken from the tableland catchment areas is 48% of the WSP total (plus a fraction of 1% by/for the stock in the parts of the gorges that are not NP).

Conclusion:

It is understood that the Water Sharing Plans aim to provide a degree of certainty of access to the various 'users' through Licenced Approvals and Entitlements to extract and use the water for their approved purpose. However; rainfall, run-off and flows are not 'certain' and the Macleay often goes from flood to drought quickly, despite its 11450 Km^2 area, partly due to it being the 2nd fastest flowing river in the southern hemisphere and its large areas of deforestation.

As water supply is variable and dependent nature, weather & climate; it is generally suggested there should be a sliding scale of extraction from the water-courses. High uptake permitted in high flows and reduced sufficiently to ensure good cultural and environmental flows and for those in the lower catchment. This would require extensive flow monitoring in the various sub-catchments and at water extraction points as well as effective reporting of all pumps large and small. It would also encourage storage from high flows; as has occurred at Kempsey. With the Stuart McIntire off river dam, to secure the town's water supply.

Ground-water bores and uptake from aquifers, such as Guyra area, need to be studied for recharge rates and piezometer monitoring, also subject to a sliding scale of extraction and monitored; by whomever is given responsibility for this task.

From many years of research of water quality by Prof Sue Wilson (UNE) and Prof Scott Johnson (SCU) it has been found and revealed that the naturally and a plume from historic mining the Antimony and Arsenic concentrations increase proportionately with the lower the flows get, resulting water temperature and acidity. (Refer SOMR's Website Link: https://saveourmacleayriver.com/macleay-river-water-quality-study/ for details.) This increases the amount of flows required for public, stock, aquatic and environmental health; and requires more reduced 'Take' by other water users in dry times; more than other catchments. Please consider and include this in the sharing plans apportionments.

While not specifically part of the WSPs: The entitlements to extract water, with glossy deeds of Tenure, to extract. These entitlements can also be traded between catchments and sub-catchments. How can this be, with an uncertain supply to specific areas from 'nature'? - As relayed above.

We thank you for the opportunity to provide this 'our say' submission. We look forward to working with all involved to achieve a good rational result for the Macleay, catchment, economy, environment and community in which we live and value. And should you have any queries re the above, please contact me at any time.

Yours Faithfully

Rupert G H Milne Home,
Save Our Macleay River Inc. Secretary
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