22 November 2022

[redacted]
Department of Planning, Industry and Environment
Sydney NSW 2000
Via email
[redacted]

[redacted]

RE: Macquarie – Castlereagh Draft Regional Water Strategy

We appreciate you and your team's time to explain the Macquarie Regional Water Strategy (**M-RWS**) over the past few weeks of consultation.

In general, our view is that M-RWS needs to focus on using water more effectively and efficiently in the future. This needs to include more efficient operations to minimise losses, more effective use of water available and continue to explore projects that can increase the reliability of the system for all users.

The strategy must deliver on improvements in the system at all times during the hydrological cycle. This includes during times of drought and floods obviously, but more importantly the "business as usual" time in between. If we can manage to store more water when abundant and manage its use more efficiently and effectively during the "business as usual" phase, our ability to manage severe drying cycles for longer and increasing resilience for all water users is achievable.

We believe there are a number of projects within the strategy that deliver on these outcomes, and we have noted our support and commentary for those below.

Some additional key points for consideration are as follows:

1. **M-RWS positioning in relation to other socio-economic strategies**

Whist we support the preparation of the M-RWS, we believe that it needs to take into consideration the broader social and economic factors of the region to be effective.

In the community sessions held, it is quite clear that there are several competing interests when it comes to future programs and works that address the many groups who have an interest or need for water, be it commercial, environmental and cultural, or critical needs.

There are several projects detailed within the strategy that warrant a high priority. How to prioritise those projects based on community feedback alone would seemingly be quite a divisive exercise. We feel it important to ensure the M-RWS considers other social and economic strategies to ensure the appropriate prioritisation of projects is achieved.

2. Future condition modelling

Whilst we understand and appreciate the need for a range of modelling scenarios, including a "worst case", our view is that the "worst case" modelling scenario as presented is not the most accurate to inform decision making on programs and projects moving forward. A more appropriate "most likely" scenario should be used to inform this process.

It is our view that all stakeholders need to find common ground and work together to appropriately determine the best use of the resource available. Using a "worst case" modelling scenario risks panicking stakeholders and making it hard to chart a path to a strategy that meets the needs of all stakeholders as best it can.

3. Environment Management and Accountability

We have seen a range of policy changes over the past 2 – 3 years that have increased water users' responsibility to comply with the laws of the day. These include implementation of the metering and telemetry policy at much cost to users, complying with the forthcoming Floodplain Harvesting licensing framework along with a more regular and thorough presence of NRAR.

Industry has led the way in an "***every drop counts***" culture in response to the policy direction of government over the past many years.

This same level of scrutiny must now extend through to the environment's use of water. Greater accountability of the way environmental water is used should be implemented as part of this strategy on the same level as all other water users. More accurate metering of environmental water use, placement of more gauging stations within the river along with a clearer view of what environmental targets are at all stages of the hydrological cycle, from flood to drought, are all needed to deliver greater transparency and accountability for the use of environmental water.

4. Specific feedback on priorities and actions

Priority	**Position**	**Commentary**
Priority 1		
Action 1.1 – 1.5 inclusive	Support	Clearer guidelines are required to understand the needs of towns as we enter the drier periods of the cycle. Similarly, it is incumbent that towns work with agencies to implement strategies to conserve and reuse water as much as possible, including stormwater harvesting and other possibilities.
Action 1.6	Comment only	Should there be consideration given to permanent storage options above Burrendong Dam, impacts on downstream communities, licence holders and reliability must be given more thorough analysis. It is difficult to see that these won't be impacted should a permanent storage be constructed.

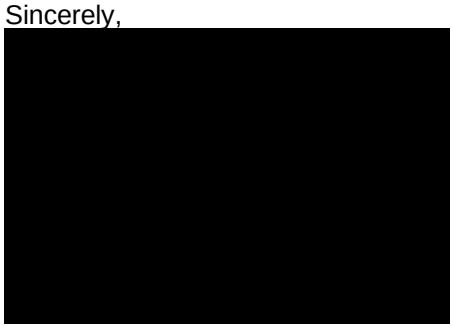
Action 1.7	Conditionally Support	MRFF supports a more local approach to understanding groundwater conditions, particularly access to groundwater during drought. However, the Lower Macquarie Groundwater zones are represented as being under-utilised in this document which concerns us. Any under-utilisation in the valley is largely due to access issues. Making groundwater available for towns is not just a matter of prioritising their extraction (depending on surface connectivity). An understanding of where the reliable water bearing zones are needs to be established. The mention of irrigation extraction causing access issues within the strategy for towns is technically incorrect, and it is more a matter of the quality of the aquifer being accessed. Reducing irrigators' take of water during dry times may have no effect on towns' abilities to access the water. More analysis of this issue is needed to assess the ability of towns to access water, while allowing industry to continue where reasonable during periods of drought. A localised approach to this analysis is required, rather than valley, region or state wide for accuracy.
Priority 2		
Action 2.2	Comment Only	We support all projects that can increase efficiencies across the valley. However, this project is open to a wide and varied set of considerations from landholders, water users, the environment and so on. In our view, to enable a more thorough consideration of this project, we suggest DPIE publish the assumptions made in this document including, but not limited to: 1. Operation of the pipeline, including commence and cease triggers of both the pipelines and the creeks system; 2. Any other operating considerations, including any changes to WSP's and so on; 3. The long-term water savings resulting from implementing the project. Release of this information will enable more thorough consideration of the project, its intent and operation by interested parties to provide better feedback. Additionally, it is important to note, should a project such as this be implemented, there must be no change to the "regulated" status of the creeks system.

Action 2.3 – Burrendong FSL	Support	In our view this should be of the highest priority for delivery under this RWS. The ability to store greater amounts of water in times of abundance for the reasonable use of all interested parties is a great priority. Whilst the RWS mentions an increase to 113%, we believe based on feedback from WaterNSW and other agencies that an equivalence of 120% is more accurate and reasonable. Whilst we accept there is much "paperwork" required to complete this transition, the dam has been operating at or above this new proposed FSL for over 12 months now, and the river operator has proven through this period this is more than achievable. Similarly, increases in technology available to the river operator since the dam's construction, along with additional gauging (proposed earlier) in the river continue to bolster this capability. For simplicity, we believe a splitting of the resource across users evenly provides a reasonable approach that could see broader support. Our suggestion would be a simple split of 1/3 of the additional resources for towns, environment and consumptive pool would give the greatest benefit to the valley.
Action 2.3 Gin Gin Weir replacement	Support	The existing weir is dilapidated and no longer fit for purpose. Multiple studies have shown that the 100 year + structure is not capable of remediation or augmentation for a fishway from an engineering or cost benefit point of view. Further, growing concern exists about the current structural integrity of the weir, and what the outcome will be should further deterioration or total failure take place. Should the weir fail, some 50 irrigation operations, 100 + farms relying on stock and domestic water from the weir pool and the Trangie Research centre will all suffer catastrophic failure. The existing weir is part of the current delivery service provided by WaterNSW. WaterNSW customer and service fees go towards maintenance of the structure, and it is incumbent that the weir is maintained to an appropriate level of serviceability, of which it is currently not.
Priority 3		
Action 3.1	Support	We strongly support continued investment in both the surface water and groundwater models.

		Over the past 2 years, we have experienced and continue to have trouble in communicating with government because of the inaccuracies and inadequacies of the Macquarie surface water model in particular. Entitlement values derived under this model for Floodplain Harvesting continue to be disputed and we know there are difficulties in deriving trustworthy outputs in relation to some of the projects within this strategy. Expedient and significant improvements in the models are necessary. In addition to the modelling, we believe more gauging stations, and upgrades to those existing within the river are required to assist in improving the modeling. Additional date with a greater level of accuracy will significantly assist model improvements, river operation and knowledge across the board.
Priority 4		
Action 4.5	Support	A more tangible set of measures around river operations during periods of drought is required. Currently, the AWD process accurately reflects the climate of the day, and whether allocations are made for the consumptive pool or not during dry sequences. What is not clear is what the environmental requirements look like during periods of drought and how they impact river operations. Water expectations must be managed responsibly and realistically by all users in a drying sequence. Clear and tangible guidelines of what water is available for the environment and towns are necessary to complete the full hydrological picture during a drying sequence. It is in these sequences when resource sharing is at its most important, keeping towns with water, the environment maintained to a measurable level and industry operating reasonably to maintain socio-economic productivity in some form when it is at its most vulnerable for regional economies. We note, in the last drought, MRFF members voluntarily surrendered 30% of carry-over from accounts to ensure town water supplies for the region were secured. This was then returned later to those accounts when water was available. This is an exemplary case of how flexibility in the system worked in the past but would ideally be avoided in the future with more and broader analysis of water needs and documented guidelines for environment expectations during a drying sequence.

Thank you for the opportunity to provide feedback. If you need to discuss any of the above further, please don't hesitate to contact me.

Sincerely,



Macquarie River Food and Fibre (MRFF) is an industry body representing water licence holders who are ground and surface water users in the Macquarie Valley Catchment. We represent and support over 500 water entitlement licence holders and their communities.

MRFF members are food and fibre producers contributing to the economic, social and environmental health of the Macquarie Valley.