

NSW Department of Planning and Environment- Water

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Submission

Macquarie - Castlereagh Regional Water Strategy – Draft 2

Orange and Region Water Security Association (**ORWSA**) takes the opportunity to comment, thank you.

There are many positive suggestions in the Action Plan that ORWSA would support but will outline some points for further consideration.

Brief summary of the proposed Action plan that ORWSA would generally support:

1.1, 1.2 with earlier and more involve community input, 1.3,1.4,1.5 with some caution,

1.6 better option is Wyangala Dam as a regional water source – no Ulmarrah Dam nor Bells River Dam as both would probably not satisfy a rigorous business case analysis or a comprehensive EIS.

No increase (on the approx. 680 ML/yr) water extraction from the Macquarie River by Orange – the 108 ML flow trigger should always exist ie no variation because of fish passage, 1.7, 1.8 Mandatory water tanks for Oberon.

2.1, 2.2 alternate supply?, 2.3 secure water at the lower level of Burrendong as is the case with Windamere, remove Gin Gin weir, 2.4

Priority 3 and actions – totally support

4.1, 4.2, 4.3 retain the native fish passage in the Macquarie during dry periods by enforcing the 108 ML flow trigger, 4.4 advocate the removal unapproved floodplain structures, 4.5,

4.6 improve the flow regime in the Summer Hill Creek and Windburndale Riverlet.

Elsewhere, tributary flows are required for river health – the environment – and should not be substituted for regulated water.

4.7 little to no support for artificial floodplain harvesting – if licenced then extraction for one 1 year and not storage for 5 years.

4.8 all riparian zones are significant – particularly in urban settings.

ORWSA would support the Water Strategy core objectives if the natural environment is improved by implementation

The most critical point is to base any NSW Water Strategy for the future on the expected availability of water and not on past historical data (Adapt NSW – Central West and Orana).

Any Water Strategy should assist the accomplishment the Aims of the Murray- Darling Basin Plan. In this regard it is imperative that that NSW Water Sharing Plans are completed in order that the Water Resource Plans can be adopted.

The end-of-system health of the Macquarie - Castlereagh Catchment, inclusive of the Macquarie Marshes, will clearly indicate the results of the Strategy. There should be a noticeable increase of water to Macquarie Marshes, not any decrease. It is misleading to use “significant” incorrectly by statistical norms: “ensuring there is no significant reduction of water flowing into the Macquarie Marshes” without stating the expected impact on the Marshes. (p72 – Consultation Paper)

- ✓ Environmental Water should be classified as high security, made available to suit environmental needs.

Environmental water should be uncoupled from general security water constraints.

- ✓ A review of licenced water entitlements should be undertaken due to the expected reduction in streamflows and replenishment of aquifers.

This could be better than using restricted allocations to assign water when “available water” is short in supply, would take away the frustration of irrigators.

- ✓ ORWSA does not support the raising of Wyangala Dam Wall due to numerous adverse environmental impacts including additional water loss from evaporation.
- ✓ ORWSA would not support the use of the flood mitigation provisions for Burrendong Dam as town, stock and domestic supply

ORWSA would support the Wyangala Dam safety upgrade as soon as practical. An upgraded wall may allow for great controlled flood mitigation, similar to Burrendong’s operational procedures (100%+ capacity).

- ✓ The Wyangala storage should function as a regional water source that could secure water for the region – Orange, Molong, Bathurst, Parkes – via existing and extending the pipeline infrastructure of Central Tablelands Water network and a proposed pipeline from Blayney to Bathurst.
- ORWSA, cautiously, supports water re-use projects as many projects encourage greater water consumption in an expected drying climate. The Macquarie-Castlereagh Water Strategy should not encourage water use to a maximum. Any water re-use should achieve an equivalent amount of water remaining in the extractive streams.
 - Councils (water authorities) should receive credit for the return of STP treated water back to the catchment, thereby maintaining a circular water cycle. This would assist the baseline stream flow a local stream. In Orange it would greatly enhance the Summer Hill Creek environment.

- Dubbo’s water reuse, 100% for irrigation, is concerning as it breaks the circular water pattern by not returning STP treated water to the Macquarie River. Dubbo, requires guaranteed supply from the lower storage, and should not experience any water shortfall as it is situated just below Burrendong Dam.
- Supports the extension of the stormwater harvesting in Orange provided that better environment outcomes are achieved for Summer Hill Creek.
- The ecology of Summer Hill Creek has suffered greatly since the STP treated water was diverted - in 1998- to Cadia Valley Operations. The Development Application (DA, Orange Library) to Orange City Council (1996) indicated approval for 10 megalitres and if available 13 megalitres/day to be transferred from STP to Cadia Valley Operations.
- This diversion (9ML/day on average) disrupts other features of Orange’s Raw Water Supply – no treated water for the recycle water pipeline², the need for substantial environmental flows from Suma Park Dam (can approx. 900 ML some years- OCC Raw Water Supply Annual Report) , higher water charges because of the operation of the Macquarie River to Orange Pipeline.
- ORWSA would support investigating “purified water” for Orange, a future possibility in all urban situations. Pleased to see the trial associated with CVO.

Many Orange residents do question Cadia Valley Operation’s social licence to operate because of its impact on the local water balance. The Productivity Commission Report- May 2021 – asks for a review of arrangements of this nature. Public Interest really demands that documents relating to the Agreement between Orange City Council and Cadia Valley Operations should be publicly available.

- In giving evidence to the NSW Upper House Water Augmentation Inquiry, ORWSA stated that Cadia Valley Operations was the largest disruptor of the water balance in the area. ORWSA still maintains that position.
- ORWSA would not support any further increase water consumption by Cadia Valley Operation (CVO) for mining activities and would seriously object to increased imported water storage capacity.
- An approval condition – Mod 14 - indicating that CVO may be required to adjust production according to available water should be applied to all mining activities in the Macquarie Catchment. It is distressing for the residents of Orange anticipating level 6 water restrictions when CVO can operate with minor restrictions or none.
- Orange should benefit from the installation and use of the Spring Creek Dam to the water treatment pipeline because 25% of storage is online again.

These points above are worthy of consideration in this M-C Water Strategy

- The impact of Water Trading should be clarified in this Water Strategy knowing that a review is currently in progress by ACCC.
 - ORWSA would object to general water licences conversion to high security water licences, except for towns gaining additional entitlements.
 - ORWSA questions trading general security licences for higher value use, as farmers can't compete against larger companies, like mining companies. It could change the intended use of the water, licenced for grapes and used for mining rocks upon a trade.
 - Regis Resources is investigating the possibility of acquiring additional water licences – active, dozer, under-utilised or surrendered licences – to satisfy its demand for water. This activity will increase water consumption in the Belubula River Catchment which would be against expectations for the future. Cadia (CVO) would have a similar strategy for acquiring additional water. If successful, this activity increases water consumption in the Macquarie and Lachlan Catchments which is support for any adaption to a changing climate.

- The operation of mines- Cadia (CVO) and possibly McPhillamys (Regis Resources) in the upper Lachlan Catchment (Belubula Catchment) could have serious impacts on the availability and quality of water in the region.
 - Cadia (CVO) possibly leaching contaminates, including copper, into the local streams
 - McPhillamys – if approved – leaching from a permanent stock pile/tailings dam of salt contamination, salts that currently pollute Warragamba Dam.
 - Acknowledging improved water quality measures, in the action points, in the draft, the Regional Water Strategies should give clear directions on how water pollution can be avoided during any mining process.

- ✓ Townships could take a few simple steps to improve their water security:

Introduce mandatory rainwater tanks on all new buildings, regulated at Sydney Water, for use in toilets, laundry, and gardens. Residents could save about 50% of the amount of council supplied water they use. Councils could plan to make the regulatory changes in their Development Control Plans (DCPs), Subdivision Codes and Local Planning Strategy Statements (LSPS) in order to implement mandatory rainwater tanks.

Introducing water saving rules as adopted by Orange. Note: Orange was on “all time” level water restrictions before this.

Townships in warmer areas – Wellington, Dubbo, Warren, Walgett.. - could be encourage to replace evaporative air conditioners (and coolers) with solar powered reverse cycle air conditioners.

Transition to a water sensitive city and making water a focus for the city/town.

www.watersensitivecities.org.au

Time to revisit the introduction of state-wide demand regulations, suggested by the NSW Water Minister before “Critical Needs” were enforced.

Regional Water Strategies should be well planned to avoid the re-introduction of “Critical Needs” legislation. The appropriate water infrastructure may not be achieved by rushed implementation under pressing need (“Critical Needs). After 7 years of operation, ORWSA doesn’t know if an audit (cost benefit analysis) of the Macquarie River Pipeline has been completed. Dubbo was placed in a weak position with approving the recycle water pipeline.

Continue with stop leakage programs.

- Regional Water Strategies should reflect an integrated regional approach with transparency and accountability. If Wyangala Dam is treated as a water source for the region – as outlined above – there would be no need for the Belubula Water Security Project to proceed. The Wyangala solution would be much better for the Coombing Creek/Belubula stream health. Bathurst would not need to consider other options like Cocks River, piped water supply from Chifley Dam which would be of little benefit economically or environmentally. The Wyangala solution would operate infrequently, more or less as an emergency supply. It would be a substantial saving on the State Budget.
 - On rejection of the Wyangala solution, ORWSA could accept a reasonable case for increasing the size of Lake Rowlands to its original design capacity (9 GL) from its current capacity (4.5 GL) to be investigated further. This would secure Central Tablelands Water supply. Noting that Orange has a water supply agreement with Central Tablelands Water from Lake Rowlands.
 - In general, water transfer between catchments should be avoided. Some transfer of water from the Lachlan Catchment to the Macquarie Catchment would offset, to some degree, the transfer from Orange to Cadia (CVO).
 - ORWSA totally rejects the proposed pipeline between Lake Rowlands and Carcoar Dam because of its environmental impact on Coombing Creek and the Belubula River downstream. The pipeline would facilitate greater consumption of water- in a drying climate - and create additional water loss to evaporation. This proposed pipeline would transfer water from the unregulated section to a regulated section of the Belubula catchment, an untenable situation.

The NSW Regional Water Strategies should align with the aspirations of the Murray-Darling Basin Plan.

References:

1. NSW Office of Environment & Heritage Adapt Central West and Orana
Climate change snapshot
2. CRC Water Sensitive Cities 2018 Case Study: Orange Stormwater to Potable:
Building urban water supply diversity, p. 25

To be completed....