

Water NSW Lachlan Regional Water Strategy Team,

Thank you again for the opportunity to comment on the latest draft of this key strategy for the future management of water in the Lachlan River basin.

Since our initial submission to you on 2 November we have made a couple of corrections to the original and also updated our advice on the erosion control / sediment reduction work has been undertaking in the Lachlan catchment.

We trust this update is relevant to you.

With best regards,

From: Sent: Thursday, November 2, 2023 4:12 PM To: 'regionalwater.strategies@dpie.nsw.gov.au' <regionalwater.strategies@dpie.nsw.gov.au> Cc: Subject: Lachlan Regional Water Strategy - Submission on Draft 3

Water NSW Lachlan Regional Water Strategy Team,

Thank you for the opportunity to comment on the latest draft of this key strategy for the future management of water in the Lachlan River basin.

Members of our Landcare Group tuned into the on-line webinar, attended the information session in Cowra, and participated in an active discussion on the strategy at our regular group meetings. Most of our members are directly affected by water management in the catchment so have a keen interest in future strategies for water management in the catchment by Water NSW.

As a group and as individual landholders / managers we look forward to working collaboratively with Water NSW on implementation of the strategies finally adopted.

You will note that in the formal submission form submitted on-line and in the attachment to this email we have addressed the need to address the future management of Wyangala Dam in any realistic document for the future management of water in the Lachlan basin. We believe this is critical and a key omission from this draft. Our local community expects to see it addressed in the final document.

With best regards,



# Draft Lachlan Regional Water Strategy –

Thank you for the opportunity to comment on this revised draft of the Lachlan Regional Water Strategy. We have three comments:

### 1. Wyangala Dam

We understand that consideration of the role and future management of Wyangala Dam has been excluded from the Draft Strategy. As the most significant man-made water control feature on the Lachlan, it needs to be included to achieve a realistic water strategy for the Lachlan.

In principle, supports the recent NSW Government decision not to increase the storage capacity of the dam on both cost, local impact, and environmental considerations.

However, the deferred safety upgrades still need to be considered to increase the dam 'airspace' to be able to better manage peak inflows and downstream flood mitigation.

During the Water NSW consultation webinar on Friday 13 October, participants were advised that the need for a Wyangala Dam Safety Upgrade had been recently reassessed using new criteria with the result that dam safety was now not an issue. This is very surprising and a concern to the local Wyangala/ Hovells Creek community.

#### What has changed so dramatically?

Three separate expert reports in the 2010-15 period recommended upgrades to Wyangala Dam, and six other NSW major dams, 'to reduce the risk of dam failure in the event of major floods, as required by the NSW Dams Safety Committee and the Dams Safety Act 1978'. Wyangala Dam was classified as an 'Extreme Hazard', and the consultants endorsed safety upgrades in two stages:

- Upgrade of the spillway gates and chute walls which has been completed' and
- Raising the dam crest by 1.8 metres by way of an upstream parapet wall not undertaken.

A new bridge and access road to Wyangala village was constructed to facilitate this work.

The consultants concluded that ignoring the risk and doing nothing was not a viable option. 'Dam crest flooding or catastrophic failure would result in massive economic loss, environmental destruction and probable loss of life'. The notes the consultant advice that dam safety is not just an 'airspace' issue, but also involves spillway capacity, water release scheduling, rainfall predictability and inflow monitoring. In short, it is a complex issue.

The remote management of the dam from Sydney is also of concern to local residents.

The emergency release of water from Wyangala on the afternoon of 16 November 2022 when the dam water level exceeded 106 percent, resulted in the most significant streambank/bed erosion and ancient river gum loss in the near 100 year life of the dam (photos below).

Concrete water tanks and heavy steel machinery was washed kilometres downstream. Some property assets have not been relocated or cannot be recovered. The riverbank for some ten kilometres downstream of the dam has been severely eroded, huge old river gums uprooted, and mid-stream Casuarinas flattened. The stream levy banks were strewn with dead fish and most of the riverbed filled with silt, a significant loss of habitat for rare and endangered species. Fortunately, no lives were lost during the release, but the water level came close to, or in a couple of cases flooded, downstream

homes with anxious residents. Many downstream residents were not warned of the pending emergency release and in some cases their escape route to higher ground was flooded. Aerial video footage of this damage is available.

Cowra and Forbes experienced significant flooding.



The management of Wyangala by Water NSW impacts on the property insurance premiums of all residents in the river corridor downstream and on the floodplain.

The recent emergency release event highlights the need to reconsider the future role and management of the dam – is its future role be to supply town and irrigation water, or future flood mitigation, especially for Forbes and the surrounding mid-Lachlan floodplain, for environmental flows and the health of the important lower Lachlan wetlands, or a combination of all three?

Wyangala Dam needs to be managed to avoid such emergency releases and resultant flooding, economic and environmental damage in the future.

With respect, we suggest maintenance of the dam water level above 90 percent for town water supply and irrigation during predictable peak inflow periods is not compatible with a role for flood mitigation, or an emergency management.

Wyangala water management is complicated by the relatively low volume of water causing even moderate flooding in Forbes. The river is managed by a rule stipulating that Wyangala cannot release water that contributes to flood water at Forbes of 15,000 ML/day or greater. When the downstream rivers, creeks and tributaries are flowing to create a moderate level flood at Forbes, Wyangala must hold back as much water as possible, which did not work for flood mitigation in November 2021 or November 2022. In both years, for weeks and months prior to the large flood events, Wyangala was releasing small volumes of water and maintaining a near capacity storage that could not withstand the sizeable inflows that followed.

#### 2. Draft Strategy 2.1 Catchment Erosion Control

strongly supports the inclusion of this strategy.

Our rationale was included within our earlier submissions.

With funding support from the NSW Environmental Trust, Local Land Services (South East and Central Tablelands), the Commonwealth Government through the Murray Darling Healthy rivers program, Hilltops Council, and local Landholders,

catchment for the past five years. However, we are only 'scratching the surface' in our small part of the catchment and see a significant work program ahead of us for the next ten years. Some of the erosion problems we are addressing are historical, but some are also very recent from the 2020-2022 very wet years.

Funding body	Date	Amount ex GST	Works
Central Tablelands LLS	2018-20	\$10,000	Erosion control works on two properties, seeding, fencing and planting
NSW Environmental Trust	2020-23	\$99,833	Erosion control works at twelve sites on eight properties
NSW Environmental Trust	2021-23	\$170,000	Erosion control works at 11 sites on seven properties
Murray Darling Healthy Rivers	2021-23	\$50,000	Erosion control works at four sites on one property
South East LLS	2023-24	\$39,523	Fencing of erosion control works on two properties
Landcare NSW	2021-23	\$29,045	Fencing, seeding and planting to protect works done under Environmental Trust funding
Summary	2018-24	\$398,401	Works at 29 sites on 17 properties

Our recent funding has been as follows:

In an earlier submission suggested this Strategy was a ten-year project at \$10 million pa. Our recent experience suggests we were optimistic, it will take longer, cost more and need to involve more community groups and landholders. Small project grants help and are appreciated but they are expensive to administer and responsible reporting.

The demise of the NSW Soil Conservation Service, its technical expertise, experience and resource machinery is now thwarting our community effort. We understand the SCS has been directed to work only on community projects such as fire trails and public land issues.

With respect, we suggest that any work public or private land to improve the health of the Lachlan catchment, limit soil erosion and movement of sand and silt into our waterways is in the community interest. The has been paying SCS for its advisory and support services at commercial rates and is now having difficulty sourcing private contractors with the equipment and expertise for soil erosion control works.

Community groups need the support of public authorities, such as Water NSW, Local Land Services and/or the Soil Conservation Service to fund and organise such large projects as catchment rehabilitation.

Our program of works was specifically designed to address the issue of sedimentation of the Lachlan described in the 2018 DPI Fisheries report for CT Local Land Services: "Lachlan River Habitat Mapping - Inundation heights for key habitat features and management recommendations for Wyangala Dam to Cottons Weir reach of the Lachlan River" and in particular, the impacts of this sedimentation on numerous riparian and aquatic threatened species of flora and fauna as well as the lower Lachlan River endangered ecological community.

The report cites the reaches of the river immediately downstream of Hovells Creek and Boorowa River as among the worst along the river. Its priority actions for on-ground investment in the project area include the remediation of erosion sites in the Boorowa River (and Hovells Creek) catchment to reduce sediment inputs that are causing the sediment slug in the river (see 3. below).

SLC estimates that from five of our properties alone, up to 1900 tonnes of sediment per year was being lost from the erosion gullies we have since stabilised. Works to date appear to have significantly reduced these amounts by slowing the speed of the water with a dam or other method (eg rock-lined channel) and allowing it to escape slowly via a trickle pipe at the base of the dam wall. University of Canberra hydrology students are assisting with monitoring our sediment retention efforts.

In a letter of support for our works program, the Senior Environmental Water Management Officer for the Department of Planning, Industry and Environment wrote that:

'[The **section**] erosion control works are consistent with the Department objectives associated with the protection, enhancement and restoration of aquatic condition of waterways and water-dependent biota. Addressing the sources of sediment influx into the upper Lachlan River by undertaking the proposed erosion control works will have local benefits to begin with. However, by undertaking a works package in stages and building on previous success, the Hovells Creek approach stands to provide regional benefits as a demonstration of how to achieve best-practice and maintain momentum when addressing landscape-scale land degradation issues.'

Here are some before and after photos of some of the works done to date:

















## 3. Draft Strategy 2.2 River health and rehabilitation downstream of Wyangala

supports this strategy.

In earlier submissions, that has drawn Water NSW attention to sedimentation of the river below Wyangala Dam and the NSW Fisheries report (as above) of a 150 kilometre sand slug in the river between Wyangala and Cottons Weir at Forbes impacting on river health, habitat for rare and endangered species, local fisheries and also extraction of water for town uses from the river.

Reclamation of the river system will be a big job and take many years. Removal of sand and silt from the river would be very expensive and is not considered a realistic option. A first step might be a detailed hydrological and ecological study of the river corridor to identify priority areas and reclamation options.

believes this Strategy should also include the river system upstream of Wyangala in which there is also substantial sand and silt movement.

The problem immediately below the dam has been exacerbated by the November 2022 emergency release of water from Wyangala Dam as described in point (1) above.

Landholders adjoining Lachlan waterways and community groups such as Landcare and OzFish are prepared to help. However, reclamation work within category three and higher streams (creeks and rivers) requires specific approvals from both NSW Water and NSW Fisheries, and specialist hydrological inputs.

would welcome Water NSW and NSW Fisheries interest and collaboration to develop plans and options for Hovells Creek and Lachlan River streambank and streambed erosion reclamation. Member properties abut the creek corridor for some 30+ kilometres. Member properties abut the Lachlan River and tributaries for in excess of 50 kilometres upstream of Wyangala.

7 November 2023