



# Healthy Rivers Ambassadors

*Promoting a healthy, working  
Murray Darling Basin for the future*

## **HEALTHY RIVERS LOWER MURRAY**

Natural Resources Commission  
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### **Submission to Review of the *Water Sharing Plan for the NSW Murray and Lower Darling Regulated Rivers Water Sources 2016***

We would like to provide comments on the *Water Sharing Plan for the Murray-Lower Darling Regulated Water Source 2016* (the Plan) and current management arrangements for Menindee Lakes.

#### **Who we are**

Healthy Rivers Lower Murray is a group of Healthy Rivers Ambassadors and River Fellows who live along the Lower Murray Valley from the Darling Junction to the Murray Mouth, in western NSW, north-west Victoria and in South Australia. They also live in communities outside the Basin which depend on Murray River water, including Adelaide. Members of the group have been active since 2016.

#### **Need to ensure Sustainable Levels of Take and secure Low Flows**

Revised water-sharing regulations are needed which provide for the maintenance of minimum low flows and fairer water-sharing arrangements which would support livelihoods and well-being of all river communities along the length of the Murray-Lower Darling system. Minimum flows need to be secured to provide drought refuges for survival and flushing flows to break up algal blooms.

Additional social support programs will be available if needed under the Restore our Rivers amendments to the Water Act, to assist with changes needed to adjust to reduced water availability, whether technical support or community services to provide health, education, re-training or networking support as needed.

Throughout the Murray-Darling Basin, rainfall and soil moisture are declining, while flood frequencies and durations are dropping. This means that Basin ecosystems are losing resilience and are less able to withstand drought. These effects will be exacerbated by climate change. It is essential that all sub-catchments include minimum flow provisions and end-of-system flows to transmit to the next sub-catchment downstream. The Murray-Lower Darling sub-catchment is an essential contributor to the well-being of the whole Murray-Darling Basin, with particular emphasis on its critical importance to large native fish species throughout the Basin.

#### **Need to Prevent Further Fish Kills**

In a previous submission to the Natural Resources Commission review of 2012 Barwon-Darling WSP, we called for actions 'to include immediate changes to provide minimum flows to the end of the Barwon-Darling system, to ensure that drought refuges can be maintained in dry times, as well as minimum water supplies to river communities.' We stated that this action was urgent, to ensure remaining fish populations can survive the summer of 2019-20, after the catastrophic fish kills of 2018-19. Sadly, there have been further fish kills since, including one at Wilcannia on 21 February 2024. The urgency remains, to secure low flows.

The recommendations of the two independent panel reviews of the 2018-19 fish kills are very similar, highlighting lack of river flows and excessive upstream extraction as primary causes and recommending urgent action to secure minimum flows to the end of the Darling system (Academy of Science 2019, Vertessey *et al.* 2019). They also recommend a fundamental review of water sharing rules and operating rules for the Menindee Lakes, to protect the vital fish nurseries and to prevent future fish kills. There is more than enough 'best available science' to determine the conditions needed to maintain sustainable environmental conditions and to sustain native fish populations. The Darling River always had permanent connections throughout its system, to support the survival of large native fish like Murray Cod and Gallop (Mallen-Cooper & Zampatti, 2018).

### **Review Operating Rules for Menindee Lakes**

The operating rules for Menindee Lakes are outdated and need urgent review. In a recent event, environmental flows to encourage native fish breeding in the Lower Darling were compromised by a release which was triggered by a rule relating to dilution of flows to South Australia. At the time, salinity at Morgan was under 400 EC, less than half of the target of 800 EC to ensure drinking water quality for Adelaide and other South Australian towns. While we were making representations to stop that dilution release, it was abruptly halted because there was another rule about holding any inflows coming from rainfall upstream. We are also concerned that the reserve volume has been dropped to 195 GL, which is totally inadequate to prevent blue-green algae forming or to dilute a blackwater event. All of these rules should be reviewed urgently, including the management handover triggers between the MDBA and NSW of 480 GL and 640 GL.

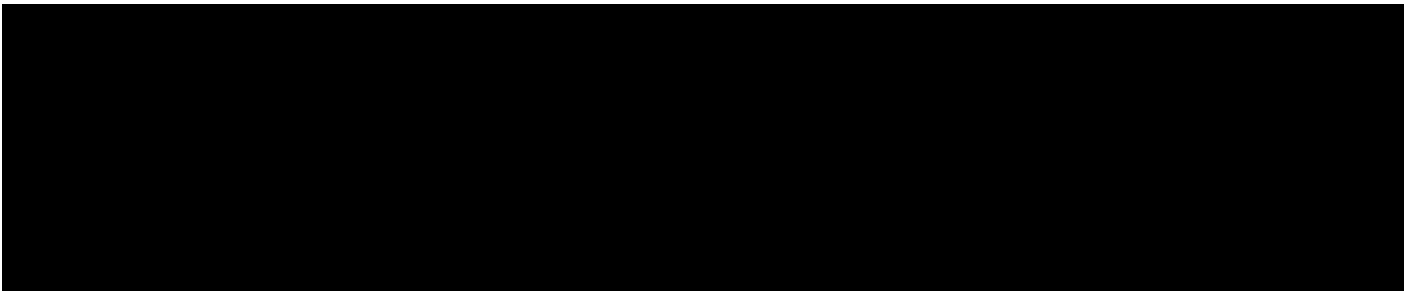
### **Impacts of Climate Change on Water Availability**

Throughout the Murray-Darling Basin, rainfall and soil moisture are declining, while flood frequencies and durations are dropping. This means that Basin ecosystems are losing resilience and are less able to withstand drought. These effects will be exacerbated by climate change. All Water Sharing Plans need to take these changing conditions and declining water availability into account when allocating shares of water resources.

### **Conclusion**

We were very concerned that the excellent work of the Natural Resources Commission in the 2019 review was not taken up by the government of the day. In the changed political climate since May 2021, we hope to see effective implementation of the recommendations by the Natural Resources Commission in formulating an updated sustainable Water Sharing Plan for the critical Murray-Lower Darling catchment and all downstream communities.

For more information contact [REDACTED] at [REDACTED]



## References

Australian Academy of Science (2019). *Investigation of the causes of mass fish kills in the Menindee Region NSW over the summer of 2018–2019*. The Academy, Canberra.

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