

Submission on EPBC Act Referral 2020/8648 Nyah Floodplain Restoration Project

17 June 2020

Referrals Gateway
Department of Agriculture, Water and the Environment
GPO Box 787
Canberra ACT 2601

Submitted by email to: epbc.comments@environment.gov.au

Dear Project Director,

Environment Victoria welcomes the opportunity to provide a submission on EPBC Act referral 2020/8648: Nyah Floodplain Restoration Project. This project is one in a series of 'supply measures' — offset projects intended to provide the same environmental outcomes as water recovery under the Murray-Darling Basin Plan.

The implementation of these projects is likely to damage the ecological character of Ramsar sites, while threatening nationally significant species and ecological communities protected under Part 3 of the EPBC Act. The review and approval of these engineering projects requires increased rigour, transparency and community consultation — in part, because of the scale of impact and poor justification of these projects. But it is also evident that each review sets a precedent for other Sustainable Diversion Limit Adjustment Mechanism projects under the Basin Plan. These projects not only have a cumulative impact, but they were designed and conceptualised as mutually dependent.

We urge the Minister to declare the Nyah Floodplain Restoration Project (EPBC referral number 2020/8648) a controlled action to be assessed by public environment report under the EPBC Act.

Flawed Strategies to Maintain Ramsar Wetlands

The Basin Plan has reinforced the importance of overbank flows for wetland and floodplain health.¹ Water spilling out of the river channel and onto the floodplain is critical for maintaining wetlands, triggering breeding events, and sustaining trees like River Red Gums.

The Basin Plan aims to deliver 'healthy and resilient ecosystems with rivers and creeks regularly connected to their floodplains'.² By restoring an environmentally sustainable level of take and recovering water for the river, Ramsar wetlands would have the water they need to maintain their ecological character.

In 2010, the best available evidence produced by the Murray-Darling Basin Authority suggested a range of water recovery could deliver these outcomes throughout the system: between 3,856 GL (high uncertainty) and 6,983 GL (low uncertainty) of surface water returned to the river system from an annual consumptive use of 13,623 GL.³

In 2012, the Authority's Board refused this advice, putting forward a Basin Plan to recover 3,200 GL of surface water, including the option to adjust this amount by initiating projects which could produce 'equivalent' environmental outcomes.

¹ Murray-Darling Basin Authority, 2012. *Assessment of Environmental Water Requirements for the Proposed Basin Plan*

² *Basin Plan 2012* (Cth) sec 5.02(2)(c)

³ MDBA, 2010. *The Guide to the proposed Basin Plan: Technical background Part 1*. Murray-Darling Basin Authority. p.114

Such projects include 'supply measures' — or offset projects — intended to provide the same or better environmental outcomes using less water. These measures include pumps and concrete regulators to deliver water to isolated sites rather than recovering water directly for the river.

These engineering solutions are fraught with uncertainty. The Independent Review Panel charged with assessing the offset methodology — determining the equivalent ecological outcomes to be expected from the supply measures — stated that the 'process described in the Basin Plan is policy operating in 'unchartered waters' from both a scientific and management perspective. No one should assume that adoption of [the method] is without significant uncertainty or risk'.⁴

The method presents inherent challenges to the maintenance of a site's ecological character.

First, it allows environmental outcomes to be traded if regional outcomes are maintained. The Murray-Darling Basin Authority's fact sheet for the environmental equivalence test presents a summary:

'While regional environmental outcome scores must be maintained, the test does allow for tradeoffs between selected environmental outcomes. This can be tradeoffs within and/or between river reaches (for example improved outcomes in one of the nine reaches in the Southern Basin region and decreased outcomes in another reach), or a tradeoff between different ecological classes and elements (for example improved outcomes for plants and decreased outcomes for fish)'.⁵

In application, this will enable watering of low-lying floodplains at the expense of higher floodplains — prioritising River Red Gums over Black Box forest. In testimony for the South Australian Murray-Darling Basin Royal Commission, Professor Jamie Pittock argued that the mechanism's discrimination is not compatible with Australia's obligations under the Ramsar Convention to conserve representative areas of different ecosystems and species. The commissioner accepted 'the unchallenged evidence'.⁶ At the Nyah site, the project proposes to inundate 421 ha or 57 percent of the 744 ha red gum ecosystem, but only 4 ha or 6 percent of the 64 ha black box woodland.

Second, the projects fail 'to apply existing floodplain inundation and climate change models'.⁷ It is unclear whether environmental water will be able to reach wetlands in the future under a range of water availability scenarios. This is particularly concerning given that the use of the projects functionally precludes the recovery of the offset quantity of environmental water. The survival of the wetlands is made to depend more heavily on engineering works which may have unreliable inputs.

Unproven environmental engineering solutions are a poor substitute for directly returning real water to our rivers and wetlands. As proposed, they are incompatible with the objectives of the Ramsar Convention.

Proposed Supply Measure Project

The Wentworth Group of Concerned Scientists (Wentworth Group) evaluated the supply measure projects using eleven conditions agreed by Basin governments and sourced from the Basin Plan, as well as one further condition drawn from an independent stocktake of supply measure projects commissioned by the Authority in 2015. The conditions are safeguards against 'unacceptable risks to communities and the environment (e.g. salinity, blackwater, unforeseen collateral damage)'.⁸

⁴ Independent Review Panel, 2014. *SDL Adjustment Ecological Elements Method Development Report – Review of final project report*

⁵ Murray-Darling Basin Authority, Fact Sheet: *Environmental equivalence test (for SDL adjustment assessment)*

⁶ Walker, Bret SC Commissioner, 2019. *Murray-Darling Basin Royal Commission Report*. p.309

⁷ Pittock, Finlayson, Howitt, 2012. *Beguiling and risky: 'Environmental works and measures' for wetland conservation under a changing climate*

⁸ Wentworth Group of Concerned Scientists, 2018. *Requirements of SDL adjustment projects to ensure they are consistent with the Water Act 2007, Basin Plan 2012, MDBA policies and intergovernmental agreements*. p.1

The assessment showed that no projects in Victoria met the conditions necessary for approval. Many of the projects require additional information before proper assessment can even be undertaken.

This includes the Nyah Floodplain Management Project, which proposes to water nearly 500 hectares of floodplains. The project falls short on several conditions: the need to demonstrate an exceedance of natural flows, to secure long-term governance arrangements, ensure the natural operation of structures, ensure the project can operate within cost limitations and include provisions for monitoring to support operations and water accounting.⁹

The supply measures projects present common environmental risks: water quality impacts, salt migration, blackwater, eutrophication, increases in pest fish species, native fish stranding, limited protections of black box floodplain forests, and unreliable water in climate change conditions. Each present obstacles to the Ramsar Convention's requirements for the wise use of wetlands and the maintenance of their ecological character.

Of particular relevance to this EPBC Act referral are the potential negative impacts on populations of threatened species and migratory birds. At present, there appears to be no fish survey in the adjacent River Murray. This obscures or ignores the presence of EPBC Act listed threatened species which may be impacted, including fourteen migratory species. The site surveys also ignored records from Birdlife Australia, while carrying out work in a dry period, potentially failing to record the presence of some migratory species.

Moreover, the basin-wide hydrological model to assess the bundle of offset projects makes the relationship between the equivalent outcomes at Nyah and the Basin Plan's environmental targets exceedingly difficult to determine. The proposal does not include information on how much water will be offset by the project that would provide for a fair analysis of alternatives, accountability for public spending, analysis of hydrological modelling or an evaluation of whether offset flows compromise the prospects of meeting Basin Plan targets.

While this project has been endorsed in principle through the Murray-Darling Basin Ministerial Council, it is clear that there are significant barriers toward meeting the objectives of the EPBC Act. The project fails to meet criteria put forward by the government for SDLAM projects, while lacking comprehensive justification. It is positioned as the sole opportunity to maintain habitat and flood the forests in Nyah while other actions — such as water recovery and relaxation of upstream constraints — remain unconsidered, and effectively precluded. It is an expensive project that demands further scrutiny by the Commonwealth.

Sincerely,



Tyler Rotche
Healthy Rivers Campaigner
Environment Victoria
03 9341 8134
t.rotche@environmentvictoria.org.au

⁹ Ibid Attachment A. p. 21-23