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Monday 10 March 2025

**Submission  
Statutory Review  
Water Sharing Plan for the Lachlan Regulated River Water Source 2016**

**Introduction**

The Inland Rivers Network (IRN) is a coalition of environment groups and individuals that has been advocating for healthy rivers, wetlands and groundwater in the Murray-Darling Basin since 1991.

We welcome the opportunity to provide comment for consideration under the statutory review of the Water Sharing Plan for the Lachlan Regulated River Water Source 2016 (Lachlan Regulated WSP). IRN engaged in the development of the Lachlan Water Resource Plan under the Murray-Darling Basin Plan in 2019 and is concerned that many of the high risks to the water source have not been mitigated through improved rules to achieve better environmental outcomes.

We note that the Natural Resources Commission (NRC) conducted an audit of the Lachlan Regulated WSP in 2023 under requirements of the *Water Management Act 2000* (WMA). Key findings included a lack of monitoring and evaluation against performance indicators and plan objectives, and that environmental flow targets, environmental water allowances and water quality allowances were not always met, credited or maintained in line with provisions of the plans.

The NSW Government has developed a Lachlan Regional Water Strategy (RWS) released in December 2024 that considers the implications of climate change on water availability in the region based on new climate modelling developed by the NSW Government.

The Lachlan contains significant environmental values that must be protected through improved rules in a new Lachlan Regulated WSP, including a lower Plan Limit for extraction.

## **Environmental significance of the Lachlan region**

Water is a significant feature of the Lachlan region's landscape and environment. The river system, floodplains, swamps, aquifers and wetlands provide habitat for many aquatic species, including birds and native fish. The lower Lachlan floodplain is home to 8 nationally important wetlands, which feature areas of valuable river red gum forest and woodlands, black box woodland and lignum. The Lachlan waterways and floodplains support up to 17 species of native fish of which 9 are listed as threatened or endangered in NSW, including the Murray cod, freshwater catfish and Booroolong frog.

Areas of high ecological value aquatic ecosystems overlap in many places with groundwater dependent ecosystems. These areas include the Great Cumbung Swamp, where the groundwater to surface water interactions are central to ecological health. There are also significant amounts of groundwater dependent ecosystems identified in the area around Condobolin.

Environmental assets in the Lachlan region play a crucial role in the liveability of the region, as well as providing recreational and tourism opportunities and have important cultural significance.<sup>1</sup>

### **Water for the environment**

Approximately 19% of licences in the regulated Lachlan River, or 127 GL of Lower Lachlan licensed water entitlements are managed by state and federal environmental water holders. The majority of these licences are general security licences. The Lachlan Regulated WSP also includes an environmental water allowance, a water quality allowance and daily environmental releases (also referred to as translucent flows).<sup>2</sup>

When formulating plans to share water, the NSW Government must take all reasonable steps to prioritise the protection of water sources and their dependent ecosystems. (Subsections 9(1)(b), 5(3)(a) and 5(3)(b) of the WMA).<sup>3</sup>

We note that the total volume of licenced water plus basic rights is 667,602 ML which is more than half the volume of Wyangala Dam storage.

### **Review questions**

1. To what extent do you think the plan has contributed to environmental outcomes?

The lack of performance reporting and failure to meet environmental flow targets, environmental water allowances and water quality allowances in line with plan rules makes it difficult to identify the extent of the achievement towards environmental outcomes. Large uncontrolled floods have been beneficial to Lachlan Valley environmental assets. Filling the gaps for low and medium size inundation has been partially available through environmental water flows. However, the environmental provisions are very complex with a bias towards securing water availability for extractive purposes. Further comment on these issues is provided later in this submission.

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<sup>1</sup> DCCEE 2024. Regional Water Strategy, Lachlan p 22

<sup>2</sup> Ibid p 21

<sup>3</sup> Ibid p 9

## 2. To what extent do you think the plan has contributed to social outcomes?

The provisions for maintenance of water supply for basic landholder rights, stock and domestic rights and local water utilities (cl 58), replenishment flows to Lower Lachlan distributaries (cl 59) and water delivery under channel constraints (cl 60) meet a number of the social objectives. Part 6 Division 5 Available Water Determinations provides security for basic rights, Stock and domestic and town water supply before other entitlements are allocated water at the commencement of each water year.

However, under cl 58 the current use of the period of lowest accumulated inflows to the water source as identified by flow information held by the Department prior to 1 July 2004 does not protect water security for any water user in the Lachlan.

Objectives relating to improvements in native fish populations for recreational and cultural purposes have not been met. Endangered fish populations in the Lachlan (the critically endangered Silver Perch, endangered Macquarie Perch and vulnerable Murray Cod) need more targeted provisions to improve breeding opportunities.

The listing of the endangered aquatic ecological community of the lowland catchment of the Lachlan River is based mainly on the modification of natural river flows resulting from river regulation (dams, weirs, etc), leading to reduced habitat quality, habitat fragmentation, loss of spawning cues, and reduced opportunities for dispersal and migration of aquatic species.<sup>4</sup>

Improvements to environmental watering provisions are critical for reversing some of the key threats to native fish populations.

## 3. To what extent do you think the plan has contributed to economic outcomes?

Many of the provisions in the Lachlan Regulated WSP are biased towards extractive users and contribute to economic outcomes at the expense of other objectives.

Provisions in Part 6 outline the limits to water availability based on a number of past water use calculations. However, there is no volumetric limit included. Compliance rules are very conservative with no transparency in regard to their calculation or implementation.

The emphasis in the RWS concerning industry ability to extract to the Plan Limit is a key issue that highlights that the limit is too high: *‘industry stakeholders have suggested that the existing water sharing plan rules or other related policies are also leading to a systemic ‘underuse’. This issue requires further analysis.’*<sup>5</sup>

The RWS has implemented a key action in relation to this issue:

Action 3.2: Investigate water use in the Lachlan region

This action should have included investigating the adequacy of the Plan Limit. The Lachlan Regulated WSP currently has an amendment provision to *‘to facilitate total extractions reaching the long-term average annual extraction limit or long-term average sustainable diversion limit’* subject to assessments and reviews.

IRN considers that the current Plan Limit with no volumetric description favours the economic outcomes at the expense of environmental, social and cultural outcomes. The NRC must investigate the adequacy of the Plan Limit provisions as part of this review.

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<sup>4</sup> NSW DPI Primefact 145

<sup>5</sup> DCCEEW 2024. Regional Water Strategy, Lachlan p 66

Part 6 Division 5 Available Water Determinations contains extremely complex provisions for water supply to extractive industries, especially the conveyance licences. The emphasis on water conveyance and calculation of losses to the Jemalong Irrigation Limited district needs to be reviewed. There are significant problems with leakage in the Jemalong infrastructure that should not lead to less water available for environmental water licences and other users. Carryover provisions in cl 41 are very generous for general security licences and conveyance licences and very complex for all water licences.

Cl 61 gives channel capacity priority to water users before Environmental Water Allowances can be released. This is clear evidence of the bias towards extractive users.

The complexity of the provisions across the Lachlan Regulated WSP, in general, favour the economic outcomes of water sharing arrangements.

4. To what extent do you think the plan has contributed to cultural outcomes?

The cultural outcomes of the Lachlan Regulated WSP are very poorly met. While there is provision for Native Title Rights under cl 19 there have been no licences granted. A successful Native Title claim across the Lachlan region was granted in August 2024 and must be recognised in a replacement plan

The large native title claim has been recognized by the Federal Court, encompassing the land and water of the Ngemba, Ngiyampaa, Wangaaypuwan and Wayilwan Peoples, stretching from the Barwon River in the north to the Lachlan River in the south, covering a vast area of western NSW.<sup>6</sup>

The specific purpose access licence provisions under cl 39 are too restrictive and do not adequately contribute to achieving cultural outcomes. None of these licences have been allocated during the life of the WSP.

5. To what extent do you think the plan has contributed to meeting its objectives?

The Lachlan Regulated WSP fails to meet the broad and targeted environmental, social and cultural objectives. There is an inherent bias in the provisions to meeting the broad and targeted economic objectives.

5.1 Cl 8 Environmental objectives:

1) The broad environmental objective of this Plan is to protect and contribute to the enhancement of the ecological condition of the water source and its water-dependent ecosystems over the term of this Plan.

2) The targeted environmental objectives of this Plan are as follows—

(a) to protect and contribute to the enhancement of the following over the term of this Plan—

(i) the recorded distribution or extent, and the population structure, of target ecological populations:

- native fish including golden perch, eel-tailed catfish, Murray cod and olive perchlet,

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<sup>6</sup> Native Title determination details NCD2024/002

- native vegetation including river red gum woodland and black box woodland
  - high diversity hotspots and significant habitat for native fish, frogs, waterbirds and native vegetation.
- (ii) the longitudinal and lateral connectivity within and between water sources to support target ecological processes:
- carbon and nutrient transport pathways, which are the connected networks of streams, riparian zones, floodplains and wetlands that transport dissolved and suspended organic material and nutrients throughout the water source
  - fish movement across significant barriers.
- (iii) water quality within target ranges for the water source to support water-dependent ecosystems and ecosystem functions,
- (b) to support environmental watering in the water source to contribute to maintaining or enhancing ecological condition in streams, riparian zones, dependent wetlands and floodplains.

IRN maintains that the volumes and provisions regulating the availability and use of the Environmental Water Allowance and the Water Quality Allowance do not contribute to the achievement of the Environmental Objectives of the Lachlan regulated WSP.

5.2 This also applies to cl 10 Aboriginal cultural objectives and cl 11 Social and cultural objectives.

The condition of fish populations in the Lachlan have not improved, waterbird populations are still declining and condition of wetlands have not been enhanced. The large, uncontrolled floods have assisted in some bounce back of environmental resilience. However, better access to low and medium inundation events is critical to the long-term survival of important environmental assets supported by the Lachlan River system.

## 6. What changes do you think are needed to the water sharing plan to improve outcomes?

### 6.1 The long-term average annual extraction limit (LTAAEL)

The LTAAEL needs to be quantified and reduced to the level of current recorded use. The plan limit is currently too high to maintain the health of the river system. This would improve the access to Planned Environmental Water (PEW) under the objects of the WMA as outlined in cl 15 Commitment and identification of PEW:

- (a) the physical presence of water in the water source,
- (b) the long-term average annual commitment of water as planned environmental water,
- (c) the water that is not committed after the commitments to basic landholder rights and for sharing and extraction under any other rights have been met.

### 6.2 Calculation and management of LTAAEL

The LTAAEL needs to be quantified and reduced to the level of current recorded use. The plan limit is currently too high to maintain the health of the river system. The argument from the irrigation industry that they can't access to the full plan limit is a key indicator that it is too high.

### 6.3 Part 10 System operation rules

This section of the Lachlan Regulated WSP provides the main source of PEW as described under cl 15. The volumes and restrictions to access daily environmental releases and EWAs is a key failing to meet the environmental objectives of the plan.

#### 6.3.1 Division 1 Environmental flow rules

These rules are extremely complex and relate more to managing Wyangala Dam than to providing environmental water timed to achieve the environmental objectives.

##### Cl 52 Daily environmental release

These complex rules restrict the availability of this environmental water to winter and spring and are linked to specific inflows to storages. Rules are also linked to water delivery to access licences, include constraints on inundation and are based on particular volumes (eg subclause 6 has a restrictive volume of 350,000 ML flow at Lake Brewster).

Subclause 7 must also restrict the use of tributary utilisation to fill water orders.

There is no relationship in these rules to environmental needs such as enhancing fish breeding events, providing low to medium inundation of vegetation, wetland areas or important cultural environments in a timely manner to support environmental outcomes. These rules need to be better linked to the targeted environmental objectives and are an example of the bias in the Lachlan Regulated WSP towards the extractive industry.

#### 6.3.2 Division 2 Water allowance rules

Cl 53 Environmental water allowances (EWA), Cl 54 Crediting and debiting rules for EWAs  
The Wyangala and Lake Brewster EWA have a volume of 10,000 ML each allocated under very specific conditions relating to available water determinations and cannot be carried over. These EWAs form a major component of PEW as described under cl 15 and are inadequate to achieve targeted environmental objectives. The volume of the EWAs needs to be increased and rules for use must relate to environmental outcomes.

##### Cl 56 Water Quality Allowance (WQA)

This allowance is a volume of 20,000 ML for the suppression of blue-green algae blooms and management of salinity levels. Unused water is forfeited each year. There are no restrictive rules around the timing and use of the WQA. This should be similar for the EWA accounts.

#### 6.3.3 Maintenance of water supply

Cl 58 (1) must be updated to the new drought of record for the Lachlan system and take into account climate change predictions under new modelling by DCCEE.

#### 6.4 Cl 61 Priority of delivery for access licences and EWA water

This rule provides another example of the bias in the Lachlan Regulated WSP towards water users at the expense of environmental outcomes. If channel capacity is insufficient to supply all water orders this rule gives precedence to basic rights, stock & domestic, town water supply and high security water orders above EWA.

This rule must be altered to give an equal share of channel capacity to EWA.

#### 6.5 Dam management rules

Cl 62 Rates of storage releases. This rule identifies that the operator must consider environmental impacts such as damage to riverbanks. However, the RWS notes that there are no operating protocol to ensure that environmental impacts are considered. This should be a requirement under the rules

*‘Restoring and protecting riparian and in-stream habitats is particularly relevant for the regulated Lachlan River as the timing and volume of releases from Wyangala Dam and re-regulating storages can impact flows and lead to bank slumping.’<sup>7</sup>*

#### 6.6 Tributary utilisation

The use of tributary inflows (often PEW from the unregulated rivers and end-of-system flows from the Belubula River) to fill water orders rather than release water from storage is not identified in the plan. Tributary inflows are an important source of PEW in the Lachlan Regulated River and must be protected from extraction. The lack of transparency around the volume and timing of tributary utilisation is a failure to meet the water sharing objectives of the WMA. This operational history of use with no apparent rules is likely to have caused environmental damage and needs to be discontinued.

#### 6.7 Trade rules to minimise large delivery volumes

The length of the Lachlan Regulated River requires very large volumes of water to deliver water orders to the end of the system. These volumes are often delivered at a time that is not beneficial to environmental needs. The development of large water dependent industries at the end of the system where rainfall is low has caused difficulties in the management of water deliveries. Trading rules should only allow for upstream movement of water licences to minimise transmission losses and concentrate irrigation industries where there is higher rainfall.

#### 6.8 Planning for extreme drought conditions

While the RWS identified that current town water supply licences are likely to be secure under predicted dry climate conditions in the future, consideration should be given to a drought reserve when making annual water determinations.

#### 6.9 Part 12 Amendments of this Plan

IRN does not support the following amendment provisions and recommends that they be removed from the Plan:

- Cl 73 Amendments relating to Part 9
- (3) The access licence dealing rules may be amended to provide for the conversion of regulated river (high security) access licences to access licences in unregulated river water sources that are upstream of Wyangala Dam
- Cl 74 Amendments relating to Floodplain harvesting
  - Cl 77 Other amendments (general):
- (1)(d) the conversion of regulated river (high security) licences with share components that specify the water source to access licences with share components that specify connected upstream unregulated river water sources.
- (3) This Plan may be amended to facilitate total extractions reaching the long-term average annual extraction limit or long-term average sustainable diversion limit
- (7) This Plan may be amended as a result of any future enlargement of Wyangala Dam.

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<sup>7</sup> DCCEE 2024. Regional Water Strategy, Lachlan p 105