#### **Department of Planning and Environment**

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Background and proposed changes to the draft Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2024

November 2023





#### ning and Environment



# Acknowledgement of Country

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land, and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work and seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Background and proposed changes for the draft water sharing plan for the Border Rivers Unregulated River Water Sources 2024

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# **Glossary and abbreviations**

Term	Definition	
BLR	basic landholder right	
LTAAEL	The long-term average annual extraction limit is the volume of water in an extraction management unit that is available to be extracted lawfully or otherwise taken under access licences and basic landholder rights requirements.	
MER	monitoring, evaluation and reporting	
No Net Gain Trade	An equivalent or greater volume of entitlement must be traded out before the same or lesser entitlement volume is able to be traded in	
NRC	Natural Resources Commission	
NSW	New South Wales	
Share component	An entitlement to a given number of shares of the available water in a specified water source	
	The share component on an access licence certificate is expressed as a unit share. The share component of a specific-purpose access licence (for example, local water utility, major water utility and domestic and stock) is expressed in megalitres/year.	
Stochastic climate data	Stochastic climate datasets are extended climate sequences that are synthesised using statistical methods applied to observed data of rainfall and evapotranspiration and can include paleoclimatic data. These extended sequences include a more complete sample of climate variability, part of which describes more severe drought sequences.	
Third-order or higher streams	'Stream order' is used to describe the hierarchy of streams from the top to the bottom of a catchment. To determine the stream order, apply the Strahler system to streams shown in the hydro line spatial data: <u>Water Management (General) Regulation 2018 Hydro Line</u> <u>spatial data   Water (nsw.gov.au)</u>	
WM Act	Water Management Act 2000	
WSP	A water sharing plan sets the rules for how water is shared for the next 10 years.	
	This is a general term that is not specific to a particular plan.	

# 1.Introduction

Water sharing plans were developed for rivers and groundwater systems across New South Wales following the introduction of the *Water Management Act 2000* (WM Act). Approximately 99% of the water extracted in NSW is now covered by a water sharing plan and managed under the WM Act. These plans protect the health of our rivers and groundwater while giving water users perpetual access licences, sustainable resource management, equitable water sharing arrangements, and increased opportunities to trade water.

NSW water sharing plans are valid for 10 years from their start date. The NSW Department of Planning and Environment amends water sharing plans throughout their life to ensure they can be carried out and comply with changing legislation. Near the end of a plan's 10-year term, the Natural Resources Commission (NRC) formally reviews it to identify any changes that are necessary to deliver better outcomes for all water users, including the environment.

Water in the Border Rivers Unregulated River Water Sources is currently managed through the *Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2012* (referred to from now on as the 'Border Rivers 2012 plan').

An extension to the original expiry date means that this plan is now due to expire on 30 June 2024 and will be replaced by the *Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2024*. This document gives background information about this new plan which we will refer to from now on as the 'Border Rivers 2024 plan'.

The department has prepared a draft replacement plan for public exhibition and consultation.

This document gives high-level background information on the planning process and explains the changes to water management that the draft plan introduces.

You can find the draft plan, maps and information about the public exhibition period and how to make a submission on the department's website.

The resources in 'Appendix A – References and supporting documents' give more details of the draft plan area, its water resources and resource management background.

# 2. Purpose of water sharing plans

Expansion of water extraction across NSW since the 20<sup>th</sup> century has seen increasing competition between water users (towns, farmers, industries, and irrigators) for access to water. This has placed pressure on the health and biological diversity of our rivers and aquifers.

In December 2000, the Parliament of NSW passed the WM Act, which has the overall objective to

#### 'provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations'

Water sharing plans play a major role in achieving this objective by providing a legal basis for sharing water between the environment and consumptive water users.

Water sharing plans are the primary means of carrying out the WM Act. They protect the basic rights of landholders to extract water and seek to balance the sustainable use of water for both economic and environmental outcomes.

# 3. Legislation, policy, and planning framework

## 3.1 Water Management Act 2000

The WM Act is the guiding legislation for water management in NSW. The Act allows for the sustainable and integrated management of water sources. It considers ecologically sustainable development, the protection and enhancement of the environment, and social and economic benefits.

The WM Act sets a maximum initial lifespan of 10 years for water sharing plans, at which point they need to be reviewed and replaced or extended. When deciding whether to extend or replace a water sharing plan, the responsible minister must consider:

- the most recent audit of the water sharing plan conducted under section 44 of the WM Act
- a report from the Natural Resources Commission that reviews (within the previous 5 years) if the water sharing provisions (legal conditions) have significantly helped to achieve, or have failed to achieve, environmental, social and economic outcomes, and if those provisions should change.

Under the WM Act, a water sharing plan may be extended for up to 2 years past the expiry date to allow the department to prepare a replacement plan.

You can review the <u>NSW Water Management Act 2000</u> on the NSW Legislation website.

## 3.2 Water sharing plans

A water sharing plan sets out locally appropriate rules and management arrangements for specific water sources that align with the principles of the WM Act.

Key elements of water sharing plans include:

- providing water for the environment by protecting a proportion of the water available for fundamental ecosystem health
- protecting the water required to meet basic landholder rights
- setting annual limits on water extractions that ensures security for water users and the environment
- giving water users a clear picture of when and how water will be available for extraction
- giving licence holders flexibility in the way they can manage their water accounts
- specifying the rules for water trading/dealings
- setting the mandatory conditions that apply to licence holders.

You can review the Border Rivers 2012 Plan on the NSW Legislation website.

## 3.3 NSW water policy

We are continuously evolving and improving water-related policy and decision-making processes that carry out the legislative framework. We do this to ensure that we deliver our objectives for water resource management effectively. We develop plans in line with the principles of the WM Act and the National Water Initiative.

You can find more information on the <u>National Water Initiative</u> on the Australian Government Department of Climate Change, Energy, the Environment and Water website.

The NSW State Water Strategy placed a sharp focus on improving the security, reliability, and resilience of Town Water Supply (TWS). It is important the inland towns have the ability to consider in-river dams as an option to improve TWS security. Water Sharing Plans contain specific rules relating to the construction and operation of in-river dams including those built for TWS.

Current policy prohibits the construction of new in-river dams in 3<sup>rd</sup> order streams or above in water sources identifie.d as having high instream value using the macro risk assessment, but this approach restricts opportunities to improve TWS security. DPE Water have committed to work with agencies to refine the policy to better manage where in-river dams can be applied for and develop guidelines for how those applications are to be assessed, including an exemption for dam applications for town water supply purposes only.

DPE Water is also currently developing a new policy to provide better protection for significant wetlands in unregulated water sources. The work has been considered in the replacement plan with a number of wetlands identified for protection. More information on the proposed changes can be found in the wetlands factsheet.

# 4. Water sharing plan review and replacement process

Under the WM Act, water sharing plans have a 10-year duration.

During the life of the plan, it will undergo an independent review at least twice, as follows:

- The **implementation of the plan** will be audited in the first 5 years of the plan under section 44 of the WM Act.
- The **performance of the plan** will be reviewed in the last 5 years of the plan under section 43A of the WM Act.

The NSW Natural Resources Commission is the independent body that audits and reviews water sharing plans. The section 44 audits aim to identify where improvements are necessary to apply the plan rules. The section 43A review is to determine if the plan is achieving the intended environmental, social and economic outcomes.

The commission reports the findings of the audits and reviews to the NSW minister responsible for water, who decides whether to extend a plan for another 10 years or to replace it. If the Natural Resources Commission recommends replacing it, the department considers the commission's recommendations when developing the replacement plan.

More information and links to the reviews of the Border Rivers 2012 plan are in section 5 of this document.

The then Minister responsible for water adopted the Natural Resources Commission's recommendation to replace the Border Rivers 2012 plan in June 2022. To allow time to review and replace the plan, the duration of the current plan was extended by 2 years.

### 4.1 Principles for water sharing plan replacement

If the commission recommends replacing a plan, the department considers the recommendations, completes a departmental review and updates the current draft content.

Any replacement plan must consider the original requirements for water sharing plan provisions under Section 20 of the WM Act, which are to:

- establish environmental water rules for the area or water source
- identify requirements for water within the area, or from the water source, to satisfy basic landholder rights
- identify requirements for water for extraction under access licences
- establish access licence dealing rules for the area or water source
- establish a regime for the extraction of water under access licences, in line with the rules referred to in the points above.

The department's review will:

- seek to improve the efficiency and effectiveness of water sharing arrangements by targeting areas where new information shows the rules:
  - could be improved
  - are no longer appropriate
  - have had unintended effects
  - are difficult to implement
- use a collaborative approach to ensure it considers the views of all stakeholders when reassessing water sharing arrangements
- aim to balance social, cultural, economic and environmental needs of the community and catchments, in line with the principles of the WM Act
- ensure that the environmental outcomes of the plan are maintained or enhanced
- ensure that changes that affect water users will be minimised where possible.

### 4.2 Scope for water sharing plan replacement

#### 4.2.1 Issues in scope

To determine which issues are in scope, we use the Natural Resources Commission's review and other sources, including stakeholder feedback, to prepare a list of known water sharing plan issues. We work with subject matter experts, as necessary, to assess the list and decide if the issues are within the scope of the replacement process. The scope of the review will consider, but is not limited to, the factors described in Table 1.

In-scope considerations	Potential information sources
New information showing current water sharing arrangements are no longer appropriate or could be improved	<ul> <li>Section 44 audits</li> <li>Section 43A reviews</li> <li>Monitoring, evaluation and reporting</li> <li>Plan suspensions</li> <li>Plan amendment register</li> <li>Stakeholder feedback</li> <li>Issues register</li> </ul>
New information that informs update of plan provisions	<ul> <li>Information about new infrastructure</li> <li>Socio-economic data</li> <li>Water user behaviour</li> <li>Risk assessments</li> <li>Threatened species information</li> <li>Groundwater Dependant Ecosystems</li> <li>Basic landholder rights</li> <li>Water entitlements</li> <li>Aboriginal water-dependent values and uses</li> </ul>
Changes in policy or other legislation	<ul> <li>Critical infrastructure legislation</li> <li>Departmental policies</li> <li>Water Management Act 2000 requirements</li> </ul>
Water sharing arrangements that have had unintended effects or have not achieved intended outcomes	<ul> <li>Section 43A reviews</li> <li>Plan suspension</li> <li>Plan amendment register</li> <li>Stakeholder feedback</li> <li>Issues register</li> </ul>
Implementation issues	<ul> <li>Section 44 audit</li> <li>Section 43A reviews</li> <li>Plan suspension</li> <li>Plan amendment register</li> <li>Stakeholder feedback</li> <li>Issues register</li> </ul>

Table 1. In-scope considerations and sources for information

• Implementation program

Individual study reportsAmendment register

Studies or amendments specified in

the water sharing plan

In-scope considerations	Potential information sources
Amendments required to carry out the NSW Water Strategy, regional water strategies or metropolitan water strategies	Strategy documentation

#### 4.2.2 Out of scope

The department has also developed criteria for what is out of scope of the water sharing plan review. Later in the planning process, these criteria can help refine the list of issues considered in scope as we examine issues and as their effects become clearer.

We use the criteria in Table 2 to assess if an issue is out of scope. We may add other criteria when relevant.

Table 2. Assessment criteria for identifying whether an issue is out of scope

Assessment criteria	Comment/Example
Does the issue relate to water charges, costs, infrastructure proposals, operational activities or a licensing matter?	Issues that a water sharing plan cannot address.
Is another program or process addressing the issue, or is it the responsibility of another department?	Examples: Improving alternative water supplies for specific towns, drainage management.
Does the issue require time and resources beyond the time frame to review the water sharing plan?	Example: A study on the effects of climate change in a particular valley.
Is the issue consistent with the current legislative and policy framework?	Allowing water users to build harvestable rights dams on third-order streams is a policy issue.

### 4.3 Updated methods and new information

#### 4.3.1 Objectives, strategies and performance indicators

Under section 35 of the WM Act, a water sharing plan must include a vision, objectives, strategies and performance indicators to describe its intent, direct its rules and measure its success.

The objectives and strategies of plans describe clearly:

- what the plan is aiming to achieve
- a roadmap to achieving the goals
- a framework for evaluating the plan's success or effectiveness.

To enable meaningful evaluations, the development of plan objectives should show clear links between what a plan can control through water management strategies and the desired economic, social, cultural or environmental outcomes for the plan area.

The plan's objectives, strategies and performance indicators are shaped by the monitoring, evaluation and reporting (MER) framework to ensure sound policy, planning and regulatory decision-making during future evaluation of the plans.

#### 4.3.2 Risk-based approach

Risk-based management helps water managers prioritise and direct time and effort to monitor, mitigate, or respond to the factors that pose the highest overall risks. It ensures that management is targeted, efficient and effective. When used adaptively, it is an excellent tool for determining where future management and monitoring effort is needed.

We have been using a risk-based water planning process in most unregulated rivers since 2004 in the form of risk assessments. These give risk-based information as part of our adaptive management approach to water sharing plans.

## 5. Water Sharing Plan for the Border Rivers Unregulated River Water Sources

## 5.1 Overview

The Border Rivers catchment covers part of northern NSW and Southern Queensland and comprises a major portion of the headwaters of the Barwon-Darling(Baaka) River system. The NSW portion of the Borders Rivers catchment has an area of 24,000 km2 (DWR 1995) and is here after referred to as the NSW Border Rivers Catchment in this section of the background document. To the east of the NSW Border Rivers Catchment lies the Clarence River catchment and to the south is the Gwydir River catchment. The terrain grades from steep to undulating tablelands in the upper catchment, to rolling hills around Ashford and Texas before merging into the extensive floodplains west of Boggabilla.

The major unregulated rivers in the NSW Border Rivers Catchment include the unregulated Macintyre (Inverell water source) and Severn (Glen Innes water source) Rivers. Other important rivers include the Mole River (Mole River water source), Beardy River (Beardy River water source), Ottley's Creek (Ottley's Creek water source) and Croppa and Whalan Creeks (Croppa Creek and Whalan Creek water source). Two major dams regulate water supply in the Border Rivers catchment.

The Glenlyon Dam on Pike Creek in Queensland, supplies regulated flows for the Dumaresq, Macintyre and Barwon rivers. The Pindari Dam on the Severn River regulates flows for the Severn, Macintyre and Barwon Rivers. The major regulated rivers in the NSW Border Rivers Catchment are the Macintyre, Severn and Dumaresq Rivers in the south-east and east. Other major rivers in the Border Rivers Catchment include the Severn River in the east, and Macintyre Brook and the Weir River in the north and north-west respectively. The state border follows the Dumaresq River and the Macintyre River below its junction with the Dumaresq River downstream to Mungindi.

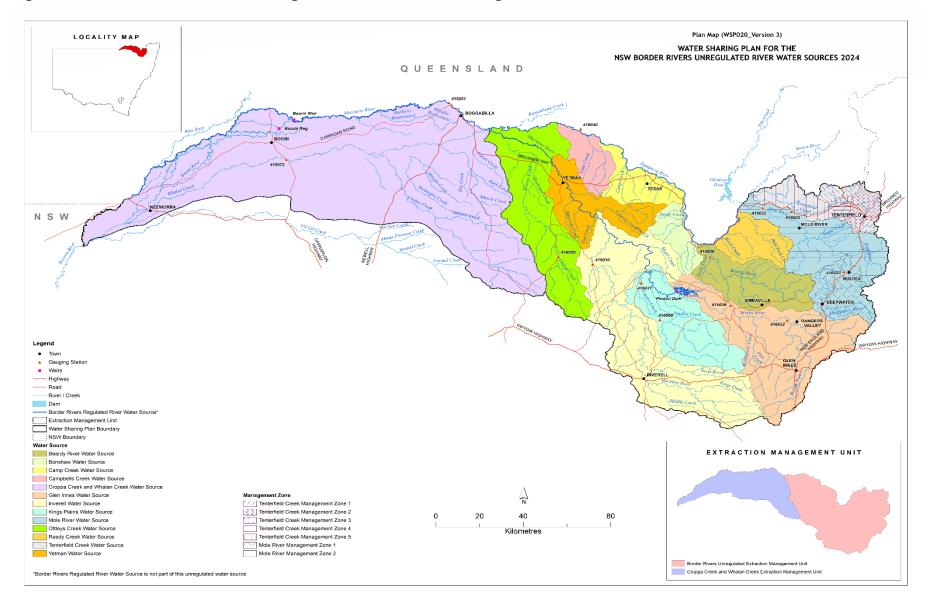
The NSW Border Rivers Catchment contains 3 distinctive landform types - tablelands, slopes and alluvial floodplains. Across the catchment, vegetation varies from high altitude areas of the eastern catchment boundary, consisting of patches of extensively forested areas which graduate as you travel west to more open forest, shrub lands and grassy plains.

For the most part there is minimal stream flow information as there are few gauges in the catchment and most streams in the plan are considered to be non-perennial. The majority of stream flow information is gathered in the regulated rivers including the Macintyre and Dumaresq. The catchment is characterised by more reliable flows in the east and less reliable and highly variable flows in the west. Flows are generally greatest in the summer months when seasonal rainfall is greatest. Stream flow records are minimal in the planning area but

records are available for some sites. Records from these gauges and others gauges with limited data were used to assist with the development of the plan.

There are many wetlands, billabongs and flood-runners associated with the main rivers of the Border Rivers catchment. The Boobera Lagoon and Morrella water course, occurring in the NSW Border Rivers catchment which are of cultural significance, are part of a wetland complex recognised as one of the few permanent standing water bodies in the Murray Darling Basin (DLWC 1996).

Table 3 and Table 4 give details of the potential levels of extraction for basic landholder rights (BLR) and licensed extraction within the Border Rivers area.



#### Figure 1. Plan area for the draft Water Sharing Plan for the Border Rivers Unregulated River Water Sources 2024

Background and proposed changes to the draft Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2024 | 16

Extraction type	Potential extraction (ML/year)
Domestic and stock	1,894
Native title	The amount of water that may be taken in the exercise of native title rights in accordance with the <i>Native Title Act 1993</i> of the Commonwealth.

#### Table 3. Requirements for water in the Border Rivers 2024 plan – Basic Landholder Rights

#### Table 4. Requirements for water in the Border Rivers 2024 plan - licensed extraction

Extraction type	Potential extraction (ML/year)
Domestic and stock	518
Unregulated river	29,797
Unregulated river (special additional high flow)	92
Local Water Utility	2,014

## 5.2 Current plan

Water in the Border Rivers area is currently managed through:

• the <u>Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2012</u>

For more information on the current plan, refer to:

- Border Rivers 2012 plan Background Document
- Border Rivers Unregulated River Water Sources 2012 Rules Summary Sheets (per water source)

The current Border Rivers 2012 plan was developed using the macro-planning approach and included stakeholder and interagency consultation. Details of the macro-planning approach can be found in the following documents:

- Macro water sharing plans approach for unregulated rivers
- Macro water sharing plans access and trading rules for pools

## 5.3 Developing the draft 2024 plan

The processes that the Department of Planning and Environment has used in developing the draft replacement plan is an update on the previous macro – planning approach.

The development of replacement plans now follows the processes described in the <u>Replacement Water Sharing Plan Manual.</u>

We continue to use some methods described in the macro-planning approach. This background document will describe the most recent and specific methods used to prepare the draft Border Rivers Unregulated River Water Sources plan 2024.

The department is responsible for implementing the WM Act, including developing water sharing plans for NSW water resources. When drafting the replacement water sharing plan, we considered:

- the section 44 audit of the Water sharing plan for the Border Rivers Unregulated River Water Sources 2012
- recommendations from the Natural Resources Commission's 2022 review of the *water* sharing plan for the Border Rivers Unregulated River Water Sources
- updated data, information and science
- the deliberations across government agencies including the Water group and Environment and Heritage group within the Department of Planning and Environment, Department of Primary Industries' Agriculture and Fisheries branches, WaterNSW and Natural Resources Access Regulator
- initial consultation with local water utilities to resolve licensing issues.

You can find the draft *Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2024* on the department's <u>website.</u>

Details of the changes to the Border Rivers 2012 plan are in section 6 of this document.

You can find information on the public exhibition phase and how to have your say on the proposed changes in section 7 of this document.

The <u>Natural Resources Commission Review of the Border Rivers plan</u> is available from the commission's website under 'Completed Reviews' from 2022. You will find a summary of their recommendations and how the new water sharing plan has addressed them in 'Appendix B – Responses to NRC recommendations'.

#### 5.3.1 Targeted consultation

We will engage with the community during public exhibition and before finalising the draft plan. Some discussions have already taken place, for example with local councils in respect to town water supplies. For further details on the public exhibition see Section 7 below.

# 6. Refining the provisions in the 2024 water sharing plan

## 6.1 Changes proposed in the draft 2024 plan

Key drivers for the changes in the 2024 plan include:

- the Natural Resources Commission's review recommendations
- contemporary water resource policy some changes to the plan align it with current policy to help improve efficiency and consistency in achieving water resource management objectives across the state
- updated data and knowledge improvements.

In general, and where possible, the changes to the plan reflect improved understanding and updated data. They aim to modernise and simplify the water sharing plan to make it easier to read while ensuring provisions are practical to implement and legally accurate.

We have proposed changes to:

- the general layout of the plan
- the vision, objectives, strategies, and performance indicators
- update the surface water long-term average annual extraction limits
- update basic land holder rights estimate and access licence share components
- update trade provisions
- adaptive management and amendment provisions.

A 'report card' is available for each water source. These detail the current rules and proposed changes that apply to a particular water source. The report cards give the public supporting information about the changes proposed in the draft plan. You can find these on the <u>department's public exhibition website</u> by selecting 'Border Rivers area' and then 'supporting documents'.

#### 6.1.1 Change the general layout

There are several structural changes in the draft plan. We have moved or reworded clauses, but their intent is the same. Such changes reflect current template styles and provide a more standard and consistent layout across the state's water sharing plans, as well as making the water sharing plan easier to understand.

For example, we have removed unnecessary notes, as well as moved and consolidated amendment provisions to the amendment part of the plan.

#### 6.1.2 Set vision, objectives, strategies and performance indicators

Part 2 of the draft plan describes the vision and objectives. The plan's vision encompasses the overall aim of the plan. The vision of the plan is to provide for the:

- health of the water sources and their dependent ecosystems
- continuing productive extraction of water for economic benefit
- spiritual, social, customary and economic benefits of water for Aboriginal communities
- social and cultural benefits of water for urban and rural communities.

The objectives of the draft plan are to:

- protect, and where possible, enhance and restore the condition of the water sources and their water-dependent ecosystems
- maintain, and where possible, improve access to water to optimise economic benefits for agriculture, water-dependent industries and local economies
- maintain, and where possible, improve the spiritual, social, customary and economic values and uses of water by Aboriginal people
- provide access to water to support water-dependent social and cultural values.

We will include objectives that are SMART (specific, measurable, achievable, realistic and timely) and more detailed in the MER plan for the replacement Border Rivers 2024 plan. These will clearly link objectives, strategies and performance indicators. This addresses the Natural Resources Commission's recommendation to strengthen MER of the plan outcomes.

The vision, objectives, strategies and performance indicators that will form part of and guide the MER plan are in 'Appendix B – Vision, objectives, strategies and performance indicators'.

# 6.1.3 Update basic landholder rights estimates and licence share components

We are updating the estimate of extraction of water under BLR contained in Part 5 of the current plan. Draft estimates of the new figures are in Part 3 of the draft plan. We are currently finalising these estimates.

Since the development of the first water sharing plans, which began before 2003, numerous methods have been followed to estimate water requirements for domestic and stock BLR. These methods were superseded in 2010 by a standard NSW approach to support the development of surface and groundwater macro-sharing plans.

In 2020, we adopted the same method used in the development of macro-water sharing plans for estimating the water requirements of domestic and stock BLR. This method is in Appendix 5 of the <u>Replacement Water Sharing Plan Manual</u>.

The 2024 estimates may differ from those in the current plan because of changes in land use, population density and the availability of more accurate spatial data.

The updated water access licence share components (water entitlements for each water source) are listed in Part 3 of the draft Border Rivers 2024 plan. They reflect total share components in each water source.

#### 6.1.4 Use adaptive management and include amendment provisions

Adaptive management means changing how we manage water in response to new information. During the life of a water sharing plan, this information may come from data collection and monitoring or from some other improvement in understanding. Such information could include socio-economic studies, hydrological modelling, ecological studies and information about Aboriginal cultural sites.

Both the WM Act and the National Water Initiative require us to use adaptive management. The WM Act allows for changes to a water sharing plan during its life if these are in the public interest. The draft plan also allows for amendments during its life. We will consult the public before making any future changes that could affect water users or the environment's access to water. Part 10 of the draft plan includes updated amendment provisions.

Examples of adaptive environmental water provisions in the replacement plan include the ability to amend:

- LTAAELs to base them on a proportion of flow if more information becomes available
- management so we can carry out native title determinations
- management so we can protect Aboriginal cultural sites that depend on water.

#### 6.1.5 Access Rules

Changes to CtP rules are proposed for the Glen Innes, Mole River and Inverell Water Sources.

The current access rule for these water sources requires licence holders to cease pumping when there is no visible flow at the pump site. Given the existence of reliable and accurate stream flow gauges suitable for setting access rules in these water source, it is proposed to introduce rules which are linked to these telemetric gauges to better protect very low flows. Gauge-based data also improves compliance by providing a digital record of access status and provides stream flow data in real time online from Water NSW.

#### **Glen Innes Water Source**

Within the Glen Innes water source, there are high ecological values including known populations of endangered and threatened water dependant species. Ecological studies illustrate that maintaining very low flows and avoiding cease to flow periods are important for maintaining instream biodiversity. There are also socio-economic benefits in retaining stream flows for basic landholder rights and town water supply.

The proposed CtP threshold of 1 ML/d, as opposed to applying the current access rule, may increase the frequency and duration of CtP events for water users. Higher CtP thresholds, such as 2 ML/d or more, may provide greater environmental benefits but markedly increase CtP frequency and duration. The proposed CtP threshold of 1 ML/d is therefore intended to provide a balance between environmental and water user requirements.

#### Table 5. Access rules in the Glen Innes Water Source

Proposed Access Rule	Flow Reference Point
Management Zone 1	Water must not be taken when flows are equal or less than 1 ML/d at the Severn at Fladbury stream flow gauge (416023)
Management Zone 2	Water must not be taken unless there has been a visible flow for 24 hours at the location the water is to be taken

#### Mole River Water Source

There are high ecological values including known populations of endangered and threatened species within the Mole River water source. Ecological studies illustrate that maintaining very low flows and avoiding cease to flow periods are important for maintaining instream biodiversity. There are also socio-economic benefits in retaining stream flows for basic landholder rights and town water supply.

The only reliable and accurate stream flow gauge in the water source is Deepwater at Bolivia (416023) gauge, located along Deepwater River in the upstream section of the catchment. Flows from this gauge can take approximately 4 days to reach the downstream section of Mole River. As such it is not suitable to introduce flow-based access rules for the whole water source at this gauge.

The proposed rule subdivides the Mole River Water Source into a Management Zone 1, with a CtP threshold of 1 ML/d at the Deepwater at Bolivia gauge and a Management Zone 2 with a CtP of no visible flow at the pump site plus 24 hour first flush rule. This rule change improves protection for the high value environmental assets located in the Mole River Water Source but may also increase the frequency and duration of CtP events for water users. Higher CtP thresholds may provide greater environmental benefits but markedly increase CtP frequency and duration for these water users. The proposed CtP threshold of 1 ML/d in Management Zone 1 and the additional of a 24 hour first flush rule in Management Zone 2 is therefore intended to provide a balance between environmental and water user requirements.

Management Zone	Access Rule
Management Zone 1	Cease to pump commences when flows are equal or less than 1 ML/day at the stream-based gauge Deepwater at Bolivia (416022).
Management Zone 2	Water must not be taken unless there has been a visible flow for 24 hours at the pump site

#### Table 6. Access rules for Mole River Water Source.

#### **Inverell Water Source**

There are medium ecological values including known populations of threatened species within this water source. Ecological studies illustrate that maintaining very low flows and avoiding cease to flow periods are important for maintaining instream biodiversity. There are also socioeconomic benefits in retaining stream flows for basic landholder rights.

The current access rule for this water sources requires licence holders to cease pumping when there is no visible flow at the pump site, which can be subjective and make applying the rule challenging for both water users and for compliance. Gauge based access rules removes such subjectivity. The data can be found online quickly and conveniently so that water users know if CtP is in place. Gauge-based data also improves compliance by providing a digital record of access status.

The proposed to introduce a gauge-based access rule of NVF at the Macintyre at Wallangra site, as opposed to applying a NVF at the pump site, may increase the frequency and duration of CtP events for water users. Higher CtP thresholds, such as 1 ML/d or more, may provide greater environmental benefits but markedly increase CtP frequency and duration, given the long travel time for flows to reach downstream and the highly intermittent nature of this water source. The proposed CtP threshold of NVF at the Macintyre at Wallangra gauge is therefore intended to provide a balance between environmental and water user requirements.

Proposed Access Rule	Flow Reference Point
Cease to pump commences when there is no visible flow	Macintyre at Wallangra stream flow gauge (416010)

#### Table 7. Access rules for Inverell Water Source

#### 6.1.6 Trading

Trading is an important tool for making both environmental and economic improvements. If trading rules are too restrictive it limits the ability to move take of water out of high environmental value areas to lower environmental value areas, provides no flexibility for water users and hinders the establishment of a water market. Where water sources have medium to low environmental value and are not flow stressed trade should be permitted.

Trading between water sources is not permitted in the Border Rivers 2012 plan.

It is proposed to permit limited trade into the following water sources (Table 8) with lowmedium instream value and low hydrological stress. There has previously been no trade within these water sources in the past 10 years. Permitting limited trade into the water sources may benefit access licence holders by increasing opportunity and flexibility and potentially reduce hydrologic stress in other water sources.

Water Source	Additional volume to be traded in
Bonshaw	10 ML
Camp Creek	65 ML
Campbells Creek	19 ML
Ottley's Creek	670 ML
Reedy Creek	15 ML
Yetman	36 ML

Table 8 Water Sources proposed to allow limited trade in up to 10 ML or 15% of entitlement

#### **Other Water Sources**

For the remaining water sources trade rules are unchanged

#### 6.1.7 In-river dams and Town Water Supply

Water Sharing Plans contain specific rules relating to the construction and operation of inriver dams including those built for Town Water Supply (TWS).

Current policy prohibits the construction of new in-river dams in 3rd order streams or above in water sources identified as having high instream value. Interagency discussions as part of WSP replacements questioned the appropriateness of the current policy on in-river dams. The policy also restricts opportunities to improve TWS security.

DPE Water have committed to work with agencies to refine the policy to better manage where in-river dams can be applied for and develop guidelines for how those applications are to be assessed.

The prohibition of in-river dams for water sources identified has having high environmental value remains but it's proposed an exemption to the rule would apply for new in-river dams built for TWS purposes only. Permitting applications for instreams dams for town water supply does not mean new dams are approved to proceed. An application for works approval is still required. Each application is assessed on its merit and may or may not be approved on this basis.

For the NSW Border Rivers 2024 plan this means that applications for in-river dams for TWS purposes only is now permitted in the Water Sources listed in clause 48(1A).

#### 6.1.8 Protection of significant wetlands

The Border Rivers and Gwydir inland unregulated WSPs include rules to prohibit the granting of new works or amendment of existing water supply works in significant lagoons and wetlands if the works will be used to extract water from these areas. These rules do not limit

new works upstream of the significant wetlands, only within and do not apply to replacement works.

In their review of the inland unregulated water sharing plans (WSPs), the Natural Resources Commission (NRC) recommended that the protection for significant wetlands be improved when plans are replaced. Significant wetlands may include internationally (RAMSAR), nationally and in some cases regionally, significant wetlands within the plan area. For some plans this recommendation has been broadened to include culturally significant wetlands.

DPE Water in its response to the NRC recommendation, has committed to consider options to improve protection of significant wetlands during the plan replacement process. The department is developing a policy which will include a method for identifying significant wetlands within a plan area and outline new restrictions that will apply. The objective of this policy is to identify significant wetlands within each water sharing plan area based on an agreed set of criteria and apply restrictions which limit extraction and development at current levels.

The department is collaborating with DPE (Environment and Heritage Group) to further refine the draft policy. Feedback received during the public exhibition of inland water sharing plans will be considered before the policy is finalised.

It is proposed that inland unregulated water sharing plans will prohibit new or amended surface water supply works being constructed in significant wetlands. These wetlands are identified in Table A of Schedule 4 in the water sharing plan and in a digital wetland map produced by the department. In addition, for identified Ramsar wetlands, no new or amended works can be constructed within or 3km upstream of that wetland. This rule will not apply to replacement surface water supply works.

#### 6.1.9 Protection of significant wetlands

The NSW – Qld Border Rivers Intergovernmental Agreement includes provisions that requires 10,000 ML per year of replenishment flows to be sent down the Boomi River from the Pindari and/or Glenlyon water storages for BLR and Stock and Domestic use. The *Water Sharing Plan for the NSW Border Rivers Regulated River Water Source 2021* includes a clause in which provides for this 10,000 ML/year and protects the flows as they move down the regulated system. These flows however are not protected via provisions in the Border Rivers Unregulated River 2012 WSP once they entered unregulated system. It is proposed to include provisions in the Border River WSP 2024 that protect these replenishment flows from unregulated licenced extraction once they enter the Boomi River.

## Public exhibition phase and making a submission on the draft plan

The draft *Water Sharing Plan for the Border Rivers Unregulated River Water Sources 2024* will be on public exhibition from 30 October to 9 December 2023.

You can make submissions throughout the public exhibition period. We encourage you to comment on all aspects of the draft water sharing plan, not just those where we propose a change. We will review all submissions carefully and consider the issues raised when finalising the plan.

To find out more about the sessions and the draft plan, visit the <u>Border Rivers Water Sharing</u> <u>Plan Public Exhibition</u> pages of the department's website. The page includes the draft plan, fact sheets, water source report cards and more information on making a submission.

You will find links to reference and supporting documents that detail historical Border Rivers area water planning processes in 'Appendix A – References and supporting documents'.

# 8. Finalisation of the draft plan

Following formal public exhibition, we will consider the feedback and issues raised during the consultation process. We will use this to help finalise the plan.

The final water sharing plan must have the agreement of the Minister for Environment and Heritage and the approval of the Minister for Water before it can start.

We expect the final plan will begin on 1 July 2024.

# 9. Monitoring, evaluation and reporting

Monitoring, evaluation and reporting (MER) are key components of adaptive management. They ensure that water sharing plans are effective in meeting their objectives.

The MER plan will be a framework specifically designed for the water sharing plan. It will follow established guidelines and include both surface and groundwater ecosystems.

The department is working on a project that will prioritise water sources for MER activities, based on risk in areas that have high levels of extraction, ecological value, or stakeholder needs.

The MER plan will be a framework specifically designed for the water sharing plan. It will follow established guidelines and include both surface and groundwater ecosystems.

# 10. Areas for further work

## 10.1 Update long-term average annual extraction limits

In New South Wales all water sharing plans include long-term average annual extraction limits (LTAAELs). These limits are designed to protect water resources, dependent ecosystems, and communities from the impacts of over-extraction in the longer term.

Assessment of LTAAEL compliance for inland unregulated water sources will use metering data once 3-5 years of metering data is available. Prior to then, DPE Water will use remote sensing to undertake a risk assessment to determine if there is a risk of extraction being exceeded in unregulated water sources. When the non-urban metering requirements are implemented, metering data will cover up to 90% of water take across NSW. DPE Water will develop a method to fill the remaining gaps in metering data for LTAAEL compliance purposes.

## 10.2 Wetlands

DPE Water has committed to consider options to improve protection of significant wetlands during the WSP replacement process. The challenge is to identify and determine which wetlands should be considered regionally significant. There is currently no comprehensive wetland assessment and mapping product available for inland NSW that may be used for this purpose.

An internal working group agreed the best approach was to identify wetlands based on existing data sets and use certain criteria to identify those wetlands which should be considered regionally significant.

Further refinement of the policy and methodology for wetland identification and assessment is expected with collaboration with other agencies.

### 10.3 In-river dams for Town Water Supply

Interagency discussions as part of WSP replacements questioned the appropriateness of the current policy on in-river dams, in part because the policy restricts opportunities to improve Town Water Security. DPE Water have committed to work with agencies to refine the policy to better manage where in-river dams can be applied for and develop guidelines for how those applications are to be assessed.

## 10.4 Metering and record keeping

We are rolling out the NSW Non-urban water metering program across the state. The new metering requirements mean water users must have metering for works of a certain size and keep logbooks for water extracted using smaller works. For more information, see the <u>NSW</u> <u>non-urban water metering framework pages</u> on the department's website.

## 10.5 Climate Change

The department is developing river models that incorporate stochastic long-term data to help guide regional water strategies. We can use these models to inform decisions for future water sharing plan replacements as they are developed across the state.

## Appendix A – References and supporting documents

- <u>Border Rivers Water Sharing Plan Public Exhibition</u> page contains the draft plan, maps and information about the public exhibition period and how to make a submission
- NSW Legislation website contains NSW legislation, including the WM Act
- National Water Initiative
- Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2012
- The background document for the Border Rivers 2012 plan
- Details of the macro planning approach:
  - Macro water sharing plans approach for unregulated rivers
  - Macro water sharing plans access and trading rules for pools
- The Natural Resources Commission's <u>Review of the Border Rivers Unregulated River</u> water sharing plan
- 2019 Audit of the Water Sharing Plan for the Border Rivers Unregulated Water Sources
   2012

## Appendix B – Responses to NRC recommendations

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
R1	<ul> <li>The Plans should be:</li> <li>a) extended for a further two years until July 2024, to allow time to complete data collection and analysis</li> <li>b) replaced by July 2024, supported by the completion of the recommendations of this review.</li> </ul>	DPE Water welcomes the recommendation to extend the Plans for a period of two years to provide for replacement plans based on best available information	The Plan was extended on 21 June 2022 for 2 years. It must be replaced by 30 June 2024.
R2	<ul> <li>The Department of Planning and Environment – Water (DPE – Water) should establish and include in the remade Plan sustainable numeric long term average annual extraction limits (LTAAEL) and undertake the required compliance assessments against LTAAELs is to assure sustainable extraction. This should include:</li> <li>a) preparing accurate estimates of historic extraction to allow calculation of up to date LTAAELs</li> <li>b) preparing estimates of current extraction based on reasonable estimates of all forms of take (noting it is unrealistic to expect all water users will be metered) and assess the potential that extraction has increased</li> <li>c) ensuring LTAAELs and other Plan</li> </ul>	<ul> <li>The Basin Plan sets an environmentally sustainable diversion limit for each water resource plan area.</li> <li>NSW has committed to preparing WRPs which meet the requirements of the Basin Plan which include demonstrating the SDL has been complied with and, where it has not, what action must occur to ensure extractions are reduced below the SDL. Any review of extraction limits would need to be undertaken within the framework of the Basin Plan and would likely coincide with a review of sustainable diversion limits for the NSW Border Rivers Water Resource Plan.</li> <li>a) The LTAAEL was based on the best available information at the time the plan was developed. If more accurate information of historic extraction is available, it will be used to</li> </ul>	<ul> <li>a) and c) see DPE Water response.</li> <li>This recommendation will be actioned, but not in the timeframes recommended by the NRC.</li> <li>There is currently a project investigating sustainable extraction for coastal unregulated systems. This project is expected to be piloting a method in 2025/26 in a priority coastal catchment and the department intends to apply the leanings from this method to inland unregulated systems.</li> </ul>

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#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
	<ul> <li>provisions are based on best available information, including around: i. ecological requirements ii. risk of LTAAEL non-compliance from entitlement exceeding LTAAEL and/or growth in extraction iii. risks posed by all floodplain harvesting activities on water sources, water dependent ecosystems and downstream water users iv. climate change projections including long term climatic data sets, updated models and contemporary observations of streamflow's and water access during the most recent drought (2017 to 2019)</li> <li>d) updating the share components of access licences listed in Part 5, Division 3 in the Plan (requirements for water for extraction under access licences) with entitlements issued and reconed in the WaterNSW Water Licensing System</li> <li>e) updating the estimated requirements for water for basic landholder rights in Part 5, Division 2 of the Plan (requirements for eater for backs landholder rights) including volumes of domestic and stock rights, native title rights and harvestable rights</li> </ul>	<ul> <li>calculate the LTAAEL.</li> <li>b) DPE Water acknowledges LTAAEL assessments have not been undertaken for the plan area to date due to a lack of metered extraction information. This has presented significant challenges, however DPE Water will develop a method to determine where there is a risk that extractions have grown. The method will be reviewed when metering data becomes available, noting that at least 3 years of metering data will be required to accurately assess usage in the Border Rivers unregulated areas.</li> <li>c) (i) (ii) (iii) see a &amp; b above vi) New climate data will be considered when reviewing access and trading rules.</li> <li>d) Updating share components in the WSP is a standard part of the replacement process. The data is taken from the access licence register which is the source of licencing information.</li> <li>e) Updating estimates for BLR, including Native Title is a standard part of the replacement process. Some work has been done to estimate the volume of water taken under harvestable rights, however significant resources are required to complete this work for inland plans, and it is unlikely to be a priority for this WSP remake.</li> </ul>	LTAAEL compliance There is extremely limited metering information and until this improves the department is developing a remote sensing method that identifies areas where growth has occurred. The department can then prioritise these areas for further investigation.
R3	Until extraction is measured and LTAAEL compliance is assessed, to adequately	a) The department agrees with the NRC that the assessment of compliance with the plan	See DPE Water response.

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
	<ul> <li>protect the priorities of the Act and ensure implementation of the precautionary principles, DPE Water should:</li> <li>a) include AWD provisions requiring the Minister to consider setting an AWD each year equal to the ration of the LTAAEL (or the BDL) to the associated entitlement unless available evidence justifies a lesser reduction. This should apply to all unregulated river access licences, including special additional high flow access licences. It should not apply to local water utility and domestic and stock access licences.</li> <li>b) engage with licence holders early in the remake process to ensure the risk of reduced AWDs is transparent and to understand potential impacts to users so that Environmental protection AWDs are set in a manner that minimised impacts on licence holders</li> </ul>	compliance action is to occur when	Work is progressing on the development of a method to assess annual extraction in unregulated areas, using a risk based approach.

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
		b) DPE Water will engage with stakeholders as part of the WSP remake process where changes to water sharing rules are being considered. Consultation regarding non-compliance with the LTAAEL is undertaken on an annual basis, where it has been determined that extraction has exceeded LTAAEL - this is not done as part of the WSP remake process.	
R4	<ul> <li>In the Plan remake, to reduce pressure on low flows and enhance economic opportunities, DPIE-Water should:</li> <li>a) investigate and set high flow conditions to facilitate trade into high flow by: <ul> <li>i. examining the existing conditions in Schedule 1A for adequacy as a high flow condition and place those licences in a high flow category.</li> <li>ii. ii. where no conditions currently exist develop high flow cease to pump conditions</li> </ul> </li> <li>b) amend Division 2 of Part 8 to allow for the creation of a high flow category</li> <li>c) assess the Part 10 access dealing rules and replace the general trade restrictions with specific restrictions only where necessary</li> <li>Any changes to trade rules should maintain protections for high value aquatic ecosystems and cultural values</li> </ul>	<ul> <li>a) A review of current access dealing rules will be undertaken as part of Plan remake to improve flexibility for water users by increasing opportunities for trading. This review will consider if trading into high flows is appropriate.</li> <li>i) DPE Water do not support this recommendation. Schedule 1A lists licences that were determined to have existing Water Act 1912 access conditions that are more stringent than access rules applied to water sources through the provisions of the Plan. It should be noted that these conditions. The Department would suggest rephrasing this recommendation which has not been accepted by NRC. Action examined by DPE Water and considered not appropriate.</li> <li>ii) DPE Water do not support this recommendation. The conditions listed in Schedule 1A will be reviewed to ensure they are appropriate to be included in the schedule as part of the</li> </ul>	a) and b) See DPE Water response c) DPE Water reviewed the existing trading rules to increase flexibility for licence holders. Since water users are already able to access high flows, there is no real incentive for licence holders to convert to a high flow licence and consequently high flow trade was not explored. Opening up trade to a limit has been proposed for some Water Sources which may provide opportunities for licence holders and reduce hydrological stress in a Water Source which has high instream value and town water supply.

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
		remake process. b) If trading into high flows is proposed a new category of licence may need to be created. New access conditions for the high flow licences would factor in protection of areas of high environmental or cultural value c) The dealing rules will be reviewed as part of the Plan remake. It is unclear which general trade restrictions this recommendation is referring to.	
SA1	Ahead of the Plan remake, the NSW Government should prioritise resources for DPE Water for the purpose of establishing fixed, numeric LTAAELs and undertaking LTAEEL compliance for unregulated water sharing plans where there is a high risk of extraction exceeding limits, including for the NSW Border Rivers Unregulated Water Sources.	See above responses above to R2 & R3	a) See response R2 and R3. No further action required.
SA1	DPE Water should review the Macro Water Sharing Plans Approach for Unregulated Rivers Access and Trading Rules for Pools Policy to ensure that it requires that drawdown rules are assessed to determine whether they are adequately protective of the water sources and their water dependent ecosystems to be consistent with the Act.	The DPE Water is undertaking reviews of the NSW Pools Policy (2012) in unregulated systems. Any decisions to change WSP rules will be informed by best available information, including HEVAE assessments, and be consistent with the Water Management Act 2000.	Pool draw down rules were reviewed during the merger of the Water Sharing Plan for the Tenterfield Creek Water Source 2003 into the NSW Border River Unregulated River and Alluvial Water Sources 2012 WSP. At the time access in the Tenterfield Creek WS was reduced from 37 licences to 4 and draw down was reduced from 20 – 30 cm to 12cm. This decision was based on pool surveys and detailed desktop assessments. The Working Group at the time requested a 24 hour fist flush rule in Tenterfield Creek be implemented as an offset to environmental

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
			impacts that may result from permitting continued draw down for these 4 licences.
			Draw down rules were also reviewed for the Beardy River and Mole River Water Sources during the 2012 Plan remake. At the time access was reduced so that water must not be taken when an in-river pool is more than 30cm below full capacity from 1 March to 31 August or more than 20cm below full capacity from 1 September to 28/29 February.
			Flow based CtPs and a 24 hour first flush rule have been proposed for the Mole River Water Source, in which may offset impacts of pool draw down rules and aligns with provisions in the Tenterfield Creek Water source.
			No further action for this plan undertaken until Pool Policy review completed.
SA2	<ul> <li>To improve transparency for water users and ensure extraction estimates are accurate, DPIE-Water should:</li> <li>a) investigate and reconcile differences in the take of water from unregulated rivers and from runoff dams (excluding basic rights) using best available information including recent floodplain</li> </ul>	<ul> <li>a) In the development of implementation programs for the unregulated water sharing plans, the Department will consider methods for assessing compliance with extraction limits, including developing procedures. The implementation of the 2018 Metering regulations and the floodplain harvesting policy will significantly improve the</li> </ul>	See DPE Water response. No action required by DPE Water.

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
	<ul> <li>harvesting modelling</li> <li>b) update estimates of historic extraction for the Baseline Diversion Limits under the Basin Plan with all historic take, including all water access licences that were converted from Water Act 1912 licences</li> <li>c) review the volume of take of water from unregulated rivers included in the NSW Border Rivers Water Resource Plan (withdrawn) for consistency with the access licences issued and recorded in the WaterNSW Water Licencing System</li> <li>d) undertake investigations to determine the volume of water taken under harvestable rights in the Plan area.</li> </ul>	<ul> <li>Department's Unregulated LTAAEL assessment and compliance regime.</li> <li>In NSW take from runoff harvesting dams is included in the reporting for unregulated take - we do not differentiate between take from rivers and take from dams. Floodplain harvesting modelling does not include take from unregulated rivers and only models overland flow on properties that qualify for a FPH licences. It is not a comprehensive record of take from dams, and its use will be limited.</li> <li>The Basin Plan requires NSW to undertaken annual SDL reporting for all SDL resources units. The MDBA will provide transparent and timely accounts of all water take in the Basin through the establishment, maintenance and publication of the Register of Take. It will report the status of SDL compliance in its annual water take reports.</li> <li>b) DPE Water has begun work to review the unregulated component of the BDL to ensure the estimate is as accurate as possible. Once completed this work will underpin discussions with the MDBA as part of the Basin Plan review in 2026. Any changes to the BDL estimates in the Basin Plan will be a decision for the MDBA.</li> </ul>	

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
		<ul> <li>c) As previously discussed, accurate usage information for unregulated water sources is limited due to the lack of metering. Entitlement figures in the WSP and the WRP submitted for assessment must be consistent in order for the plan to be accredited. WaterNSW's Water Licencing System is a database that is regularly updated, and therefore there maybe be inconsistencies with the WSP as entitlement figures are as at the commencement date of the plan.</li> <li>d) Estimating take under harvestable rights across NSW would require significant funding, time and resources. While this information would be useful it is assumed this form of take is relatively small to other forms of take and it not likely to be an immediate priority without external funding being secured to do the work.</li> </ul>	
R5	<ul> <li>In the Plan remake, to ensure access is equitable within the Plan area and downstream of the Plan, DPIE-Water should:</li> <li>a) establish cease to pump conditions based on environmental and basic landholder needs and apply these consistently to licence holders of the same type within the same water source or management zone b) consistent with Clause 65(1)(b) of</li> </ul>	<ul> <li>a) Access rules established by the Plan are included as mandatory conditions on all unregulated water access licenses. A review of access rules will be undertaken as part of plan remake and will consider various information as outlined in the Replacement water sharing plan manual published on the DPE Water website. It should be noted that there are historical access conditions, often from Land Board Hearings or objections which may be more stringent than the mandatory condition in the Plan. Where</li> </ul>	<ul> <li>a) Access rules have been reviewed for medium to high-risk water sources and CtP thresholds at a gauge site will be implemented for the Glen Innes and Inverell Water Sources. The Mole River Water Source will establish 2 Management Zones with CtP based provisions at a gauge site for Management Zone 1 and a no visible flow plus 24 hour first flush rule at the pump site in Management Zone 2</li> </ul>

NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
<ul> <li>the Plan ensure that licence</li> <li>conditions are required on the</li> <li>licence rather than the works</li> <li>approval, and that conditions are</li> <li>consistently worded and</li> <li>enforceable</li> <li>c) include a clause in the revised Plan</li> <li>to ensure water is protected during</li> <li>high flow events to meet Barwon-</li> <li>Darling flow targets, consistent</li> <li>with rules in the connected</li> <li>regulated river water sharing plans.</li> <li>Until then, ensure any Section 324</li> <li>orders intended to protect flows to</li> <li>meet those flow targets adequately</li> <li>address unregulated river access.</li> <li>d) include provisions to ensure that</li> <li>held environmental water or spilled</li> <li>from the Border Rivers regulated</li> <li>systems is protected from</li> <li>extracted for purposes other than</li> <li>domestic and stock basic</li> <li>landholder rights</li> <li>e) subdivide the Croppa Creek and</li> <li>Whalan Creek Water Source into</li> <li>smaller managements zones to</li> <li>facilitate development of access</li> <li>and trading rules most appropriate</li> <li>for addressing the localised risks</li> <li>and water management needs</li> </ul>	<ul> <li>these exist, they have been identified in a schedule in the plan to ensure the conditions continue to apply, and the level of environmental protection is not reduced.</li> <li>b) The mandatory conditions for access rules are applied according to the Plan rules and flow classes etc. They are applied consistently unless there is an exemption or exclusion from rule for some reason specified in the Plan. Sometimes licence holders need to comply with ctp rules which relate to the nominating work (higher of Water Act rules) and in these instances the condition may be imposed on the work rather than the licence. More work is required to inform what authority these types of conditions are linked to. Significant resources would be required to make changes to the licensing products. This will not be undertaken as part of this plan remake</li> <li>c) There is an extensive suite of work underway across the Department towards better understanding water flow, access and connectivity, across the North West and including in the Barwon Darling. The outcomes of this work may inform future work to revise the rules in various WSPs. It should be noted achieving flow targets in the BD is achieved by restricting access to supplementary water in upstream regulated systems. Access to supplementary</li> </ul>	<ul> <li>b) See DPE Water response.</li> <li>c) See DPE Water response.</li> <li>d) Provisions have been implemented the Plan remake to protect Replenishment flows sent from the regulated system from unregulated licenced extraction.</li> <li>Provisions to protect HEW in the unregulated system have been reviewed. DPE Water will not be implementing active management t protect HEW in the Border Rivers area at this time as there is not sufficient infrastructure to support such provisions.</li> <li>e) This recommendation has been reviewed. Investigation by DPE Wate Source into smaller Management Zones would not be appropriate without sufficient infrastructure to manage access rules, Furthermore, localised risks are considered to be minimal as rules prohibiting trade into or between high value areas are already in place.</li> <li>f) And g) See DPE Water response</li> </ul>

# NRC fina	l recommendation	DPE W	ater response	Action taken for Replacement Plan (June 2023)
e e o g) re tl	einstate objectives regarding quitable sharing of water and nsure the Plan rules reflect these bjectives. eview access conditions and revise hem as necessary to ensure that hey are clear, consistent and nforceable.	d) e) f)	announcements is at the Minister's discretion and a number of factors are considered before an announcement is made (including the triggers in the WSP). Restricting unregulated licence holders who historically have been able to access that water is likely to have significant impacts on irrigation businesses and would erode their property rights. This would be at inconsistent with the economic objectives of the Plan. Provisions to protect replenishment flows from being extracted for irrigation purposes will be considered during the plan remake. HEW has not historically been delivered through the unregulated water sources. Further investigation into when there is a risk to HEW from extraction in the unregulated area has been undertaken as part of the replacement process. Implementation of active management will not be a priority in the Border Rivers Unregulated River plan area until environmental water manages indicate there is a desire to deliver HEW to these areas. Management zones will be established in water source if they are required to better manage access to low flow. As previously stated The WMA is not clear about how to share water equitably and refers broadly about sharing water. The	

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
		<ul> <li>economic objectives and strategies in the WSPs have interpreted the objects by identifying the need to provide a stable and predictable framework for water sharing among water users, provide flexibility of access to water and by managing to the LTAAEL. Whilst cease to pump rules are applied to all water users of the same licence category in a water source, equitable share of water in unregulated systems is not really achieve. Unlike regulated systems where water is ordered and deliver, as access is dependent when you are located in the system, infrastructure and pump size or individual conditions on licences/works approvals.</li> <li>g) All mandatory conditions imposed to give effect to Plan rules, including those relating to access conditions, are reviewed by the Department at plan remake to ensure they give effect to existing, revised or new rules, and are clear, consistent and enforceable (in accordance with the AELERT Guide to Drafting Quality Conditions). Licence/approval holders are then notified of condition changes resulting from the review.</li> </ul>	

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
SA3	DPIE-Water should upgrade the Neeworra Gauge to real time to allow transparent and enforceable access conditions to be implemented in the Plan area and enable assessment, management and better modelling of flows in the Boomi River, including discharges to downstream water sources, and to understand connectivity with the Barwon Darling	DPE Water have recently completed a review of our hydrometric networks in the Murray-Darling Basin, in collaboration with WaterNSW. The review assesses our hydrometric networks within the joint agencies area of operation and responsibility, as well as considering the interests of water stakeholders. This work fulfils requirements under the Murray– Darling Basin Compliance Compact, 2018. A hydrometric Improvement Plan was developed and together with the Commonwealth, we have secured funding to install new equipment and sites. This will update our extensive hydrometric network and make it more robust. Gauges where available, will be considered when reviewing access rules. Unfortunately the Neeworra gauge was not identified as a priority for upgrading as part of the Murray–Darling Basin Enhanced Water Monitoring and Information (EWMI) program.	See DPE Water response. This gauge has been identified for a potential upgrade in the next hydrometric review.
R6	As part of the Plan remake, DPE-Water should undertake culturally appropriate consultation with all Nations in the Plan area and inclusive research to identify the water dependent Aboriginal cultural values and assets and their specific water requirements to meet a) consulting with the Traditional Owners of Boobera Lagoon, including the Boobera Lagoon Reserve Land Manager to develop a comprehensive understanding of Aboriginal values	The NSW Government is working with peak Aboriginal bodies and communities on a framework for engagement with an intention to consult on a range of water related issues including Regional Water Strategies and Water Sharing Plans. It is anticipated that consultation will also occur with local Traditional Owners, Local Aboriginal Land Councils, and other local Aboriginal Groups under the Aboriginal Water Strategy. This consultation will include knowledge sharing on water sharing plans and identification of opportunities to improve Aboriginal involvement of water management in NSW and will draw on existing information to	See DPE Water response.

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	<ul> <li>associated with Boobera Lagoon and the water management and extraction activities that place those values at risk, in line with the Aboriginal waterways assessment methodology</li> <li>b) investigating cultural flow requirements in line with the cultural flows methodology and practical ways to deliver those flows, including recognition of any existing work or plan of management</li> <li>c) identify constraints, barriers and diversion installed that impact the natural flow of waters into Boobera Lagoon, work with NRAR to establish the legality of those structures and , if legal, find alternatives to allow the natural flow of water to return</li> <li>d) working with the Traditional Owners, propose and agree on rules for inclusion in the Plan to protect Aboriginal values related to water, including cultural flows and, if required, the physical and institutional infrastructure, licences and resources needed to deliver water</li> </ul>	identify and protect known high value cultural sites, where appropriate. The WSP can be amended at any time if it is in the public interest to do so. DPE Water is working with Aboriginal groups to codesign and deliver an Aboriginal Water Strategy. The design of the strategy will consider the matters raised by the NRC, including access to water. DPIE will ensure ongoing engagement with Traditional Owners, communities and relevant stakeholders for the best possible outcomes on Country. Different options for how to provide access to water are being investigated as part of the Aboriginal Water Strategy and Closing the Gap, including the repurposing of licenses that maybe lapsed or surrendered, creation of water allowances, and changes to Aboriginal cultural access licences to allow use for boarder purposes. An Implementation Plan has been released to support the priorities set out in the State Water Strategy, together with an Action Plan outlining what will be delivered in 2021/22	
R7	to the Boobera Lagoon. In the Plan remake, to improve protection of cultural values and assets, DPE-Water should: a) embed rules to achieve actions in the	a) DPE Water is working with Aboriginal groups to codesign and deliver an Aboriginal Water Strategy. The design of the strategy will consider the matters raised by the NRC, including access to water. DPF Water will	<ul> <li>a) See DPE Water response</li> <li>b) a letter has been sent to the NTS Corp to invite Western Bundjalung Nation to consult with DPE Water regarding their Native Title</li> </ul>
	<ul> <li>a) embed rules to achieve actions in the NSW Water Strategy relating to</li> </ul>	including access to water. DPE Water will ensure ongoing engagement with Traditional	regarding their Native Title Determination. A response from

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	<ul> <li>Aboriginal People's rights and values and increase access to, and ownership of, water for cultural and economic purposes, and specifically for Boobera Lagoon</li> <li>b) consult with the Western Bundjalung People native title holders on native title needs, assess the water requirements necessary to meet those needs, and ensure the Plan provisions adequately protect those basic landholder needs in the Tenterfield Creek Water Source</li> </ul>	Owners, communities and relevant stakeholders for the best possible outcomes on Country. Different options for how to provide access to water are being investigated as part of the Aboriginal Water Strategy and Closing the Gap, including the repurposing of licenses that maybe lapsed or surrendered, creation of water allowances, and changes to Aboriginal cultural access licences to allow use for boarder purposes.	<ul> <li>Bundjalung Nation has not been received.</li> <li>c) and</li> <li>d) DPE Water endeavored to meet with the Toomelah Aboriginal Group to discuss surface water issues surrounding Boobera Lagoon. Two meetings were anticipated, one in late 2022 and one on 24 March 2023. Neither of these meetings went ahead due to Sorry Business at the time.</li> </ul>
	c) include a schedule of water-dependent Aboriginal cultural values and assets and provisions to protect and enhance them, which may include the provision of cultural flows and protection of Aboriginal values in in-river and off- river pools, and specifically for Boobera	An Implementation Plan has been released to support the priorities set out in the State Water Strategy, together with an Action Plan outlining what will be delivered in 2021/22.	DPE Water have been in contact with Elders of the Gomeroi Nation and feedback has indicated the main concern was that cultural sites of significance are not protected, which they are under the Border Rivers FMP.
	Lagoon d) assess the impacts of floodplain harvesting and floodplain works on Boobera Lagoon and, if required, ensure licence conditions protect surface water flows into Boobera Lagoon and the Morella Watercourse.	<ul> <li>b) Note: The Department will undertake further investigation to understand the extent of the Western Bundjalung Native Title Determination. Indications are that the Determination is relative to the Clarence River catchment and not the NSW Border Rivers.</li> <li>c) PCO drafting protocols will determine the specifics of the water sharing plan. A background document is being developed which will provide more detailed information on the water sharing plan. It would be more</li> </ul>	

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		<ul> <li>appropriate to include relevant supporting information to cultural specific matters in this document. It should be noted that there are sensitive cultural issues around the potential identification of cultural values and sites that the Department will have to consider.</li> <li>d) DPE Water will further investigate water sharing arrangements for Boobera Lagoon to ensure cultural values are adequately protected</li> </ul>	
SA4	<ul> <li>To improve protection of Aboriginal values at Boobera Lagoon, and for other water dependent cultural assets, DPE-Water should:</li> <li>a) amend the pools policy to give greater priority to protecting Aboriginal values including those associated with Boobera Lagoon</li> <li>b) assess Aboriginal groundwater values associated with Boobera Lagoon, including understanding groundwater needs, monitoring and protection requirements (noting this assessment should be conducted at the same time as the assessment of surface water values)</li> <li>c) install a continuous height recorder and</li> </ul>	<ul> <li>a) The Aboriginal Water Strategy will consider the matters raised by the NRC. It is hoped it will provide guidance on how to better protect Aboriginal values and places of cultural significance like Boobera Lagoon. In the interim DPE Water will continue to work with Traditional Owners, Local Aboriginal Land Councils, other Aboriginal Groups and agencies partners to improve protection in these areas. This work will inform how current policies, such as the pools policy, should be amended to improve protection cultural assets. This timing for developing an Aboriginal Water Strategy is unlikely to align with the timing for replacement, however consideration will be given in the replacement process to whether additional rules to protect Boobera Lagoon are necessary</li> <li>b) Before determining if changes to the</li> </ul>	

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	<ul> <li>determine a comprehensive water balance for Boobera Lagoon and the Modella Watercourse, including contributions of surface flows, runoff and groundwater across relevant water sharing plans</li> <li>d) investigate current and potential impacts that groundwater extraction may have on the Lagoons Aboriginal cultural values and, if required, include rules in the relevant groundwater sharing plan to mitigate the impact of groundwater extraction on the Lagoons values</li> <li>e) ensure other land and water management agencies (for example, Local Land Services) are involved in this process to provide for a holistic consideration of the actions that can improve cultural and environmental outcomes for Boobera Lagoon.</li> </ul>	<ul> <li>groundwater sharing plan would support the Aboriginal values associated with Boobera Lagoon we need undertake investigations to address the issue. Based on existing information and knowledge shared between the department and Aboriginal people we will assess 1) the connectivity between groundwater and the Boobera Lagoon, 2) the risks arising from groundwater extraction, 3) how existing groundwater sharing rules mitigate the risks and 4) identify if additional groundwater sharing rules would further mitigate risks to better support the Aboriginal values associated with the Boobera Lagoon. This will be complete within 5 years (by end 2027) in time to consider if changes to the groundwater sharing plan are appropriate before the water sharing plan expires in 2030.</li> <li>c) Recommendation not supported. DPE Water have committed reviewing the water sharing rules for Boobera Lagoon to ensure it is adequately protected. However we cannot commit to installing infrastructure that has not been funded.</li> <li>d) See b)</li> <li>e) DPE Water will engage with relevant agencies as required during the plan remake.</li> </ul>	
R8	In the Plan remake, to improve environmental outcomes, DPE-Water should:	a) DPE Water have recently completed a review of our hydrometric networks in the Murray-Darling Basin, in collaboration with WaterNSW. The review assesses our hydrometric networks	<ul> <li>a) and b) iv) See DPE Water response.</li> <li>b) Flow based access rules have been reviewed for medium to high risk water sources and new provisions to</li> </ul>

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#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
	<ul> <li>a) review the current gauging network to identify where existing gauges can be referenced to establish flow classes and flow based cease to pump rules consistent with other unregulated water sharing plans, and identify where new gauges may be warranted in medium to high risk water sources to reduce reliance on cease to pump where there is no visible flow rules</li> <li>b) revise provisions to address identified concerns for medium to high risk water sources, including as a minimum, protection of pools and base flows. For example: <ul> <li>i. where necessary to adequately protect environmental flows and basic rights, establish flow classes and flow-based cease to pump rules (see Recommendation 5a) and/or introduce a first flush rule</li> <li>ii. where necessary to protect environmental values, including under projected climate change, revise drawdown rules for pools in water sources classified as having high instream and/or cultural values</li> </ul> </li> </ul>	<ul> <li>responsibility, as well as considering the interests of water stakeholders. This work fulfils requirements under the Murray– Darling Basin Compliance Compact, 2018. A hydrometric Improvement Plan was developed and together with the Commonwealth, we have secured funding to install new equipment and sites. This will update our extensive hydrometric network and make it more robust. Gauges where available, will be considered when reviewing access rules</li> <li>b) Access rules will be reviewed using best available info and is a standard part of the remake process.</li> <li>iv) repeat of recommendation 5c - see above for response</li> </ul>	protect low flows will be implemented for the Mole River, Glen Innes and Inverell water sources. A review of pool draw down provisions was conducted in 2014 during merging of the 2003 WSP for Tenterfield Creek and the Border Rivers Unreg WSP. At the time access was reduced from 37 licences to 4 and draw down was reduced from 20 – 30 cm to 12cm. This decision was based on pool surveys and detailed desktop assessments. The Working Group at the time requested a 24 hour first flush rule in Tenterfield Creek be implemented as an offset to environmental impacts that may result from permitting continued draw down for these 4 licences. Draw down rules were also reviewed for the Mole River Water Source during the development of the 2012 Plan. At the time access was reduced so that water must not be taken when an in-river pool is more than 30cm below full capacity from 1 March to 31 August or more than 20cm below full capacity from 1 September to 28/29 February. Flow based CtPs and a 24 hour first flush rule have been proposed for the Mole River

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	<ul> <li>iii. reinstate the protection of pools in the Tenterfield Creek Water Source (no pool drawdown) that was in place towards the end of the Water Sharing Plan for the Tenterfield Creek Water Source 2003</li> <li>iv. determine the contribution of flows from the unregulated Border Rivers to Barwon-Darling flow targets, include relevant targets in the replacement Plan and clarify how Plan rules would be implemented to support these targets</li> </ul>		Water Source, in which may offset impacts of pool draw down rules and aligns with provisions in other Water sources of high instream value with draw down provisions.
R9	<ul> <li>In the Plan remake, to strengthen the protection of regionally significant wetlands, DPE Water should:</li> <li>a) work with DPE-Environment and Heritage and DPI Fisheries to update the list of regionally significant wetlands and lagoons in Schedule 5 and 6 of the Plan</li> <li>b) assess the risks to these environmental assets and the adequacy of current rules in protecting environmental values from an altered flow regime (this should be informed by the final</li> </ul>	<ul> <li>a) Schedules 5 and 6 will be reviewed using the most up to date information available during the plan remake.</li> <li>b) Risk assessments do assess risk to wetland and lagoons by including EEC in the HEVAE and consequence assessments. The outcomes of the risk assessment will be considered as part of the remake process.</li> <li>c) see above, access and trading rules will be reviewed using most up to date information.</li> </ul>	<ul> <li>a) Provisions have been included to prohibit new surface water works within and 3km upstream of internationally significant (Ramsar) Wetlands and within nationally and regionally significant wetlands. Trade into the scheduled wetlands will also be prohibited. These wetlands will be listed in a Schedule in the Plan. This rule will not apply to replacement surface water works. The schedule of wetlands is based on wetlands identified through an agreed methodology using existing wetland mapping datasets refined by</li> </ul>

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	Border Rivers Long Term Water Plan and fish and flows work) c) update rules where necessary to adequately protect identified wetlands and lagoons		<ul> <li>local knowledge.</li> <li>The methodology developed by DPE Water has identified an additional 26 wetlands in the NSW Border Rivers Plan area for inclusion into Schedule 4 and represents significant improvement in protection of these areas.</li> <li>The current protections will apply to the existing wetlands in water sharing plan.</li> <li>b) See DPE Water response</li> <li>c) See a)</li> </ul>
R10	<ul> <li>In the Plan remake, to ensure environmental releases can be made from in-stream structures, DPE-Water should use best available information to:</li> <li>a) assess current dams and weirs and their ability to deliver environmental flows downstream</li> <li>b) determine any necessary infrastructure upgrades to deliver environmental flows and support fish movement and determine which water supply dams and weirs are a</li> </ul>	Assessing town water supply (TWS) dams and weirs for their ability to deliver environmental flows is not undertaken as part of the remake process. For unregulated rivers, environmental flow and access conditions are specified on the work approval or access licence held by the Local Water Utility (LWU). The NSW government policy approach is that the implementation of new or enhanced environmental flow conditions are required where infrastructure is augmented. That approach ensures that LWUs have adequate opportunity to strategically assess all options to ensure continuing	See DPE Water response. No further action required.

			2023)
c) ident envir prior these	rity for modification to improve ronmental outcomes tify suitable, outcomes-focused ronmental flow regimes for rity dams and weirs and ensure e are reflected in Plan rules and nee conditions.	water security, ensuring decisions are community based, affordable and sustainable. The Safe and Secure Water Program is the government's key infrastructure program targeted at addressing priority town water security, water quality and environment (sewerage) risks in regional NSW. Where augmentations are required to address water security issues, that program is available to assist with funding to meet community and regulator requirements, which can include new or enhanced environmental flow conditions where appropriate. If existing TWS storages have conditions which specify they must pass minimum daily releases or environmental flows, these conditions must be adhered to. If, for any reason these conditions cannot be complied with it is the responsibility of the relevant LWU to contact NRAR to negotiate an appropriate course of action. The DPE regional water utilities teams works closely with LWUs to assist with these discussions and negotiations. The outcomes may include ensuring work is undertaken to upgrade infrastructure or reviewing conditions on the licence. Environmental releases not associated with an augmentation could be considered in a wider, more strategic context. For example, the Far North Coast draft RWS includes an option (21) to 'Establish and/or increase environmental water releases from major storages in the Far North Coast'. If the option progresses(not yet decided) it	

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		from major works across the region as part of a broader package of actions, rather than only when changes to existing structures are proposed.	
R11	In the Plan remake, to improve environmental outcomes in the Plan area, DPE-Water should: a) ensure the remade Border Rivers Plan reflects the latest information on environmental water requirements from the NSW Border Rivers Long Term Water Plan and associated fish and flows advice from NSW DPI Fisheries b) consider how plan provisions can help to ameliorate water quality issues in line with the Plan's water quality objectives, including recovering from the impacts of the 2019-20 bushfires c) retain Clause 48(1)(A) of the Plan and amend it to recognise Aboriginal cultural values associated with water sources and	<ul> <li>a) New information will be considered when reviewing the water sharing arrangements and environmental water requirements (EWRs) will be an important part of the options development stage, where appropriate. DPIE Water has processes in place to incorporate new scientific information into plan replacements including collaboration with NSW Fisheries as part of the development of the HEVAE and Risk Assessment for the plan areas. LTWPs aren't designed to develop water sharing rules, they are required under the Basin Plan to implement the Basin Watering strategy. They prioritise ecological assets and include long-term aspiration targets which inform the management of Environmental Water Allowances and Held Environmental Water (HEW) across the Basin. DPIE Water will continue to work closely with DPI Fisheries and EES to develop access rules to improve environmental outcomes where required.</li> </ul>	See DPE Water response. No further action required.
	protect these values from instream dams	<ul> <li>b) The NSW Border Rivers surface water quality management plan refers to the LLS North West and Northern Tablelands Local strategic plans 2016-2021 as the</li> </ul>	

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		appropriate plan for the implementation of land management actions that will assist in improving water quality. There is limited to no ability to resolve land management issues such as erosion due to bushfire impacts through the WSP in an unregulated system. Measures adopted to improve connectivity and protect low flows will also assist in protecting water quality.	
		c) Clause 48 (1)(A) will be updated based on the new information provided by the risk assessment, in line with the current policy on in-river dams.	
		i. DPIE Water is working with Aboriginal groups to codesign and deliver an Aboriginal Water Strategy. The design of the strategy will consider the matters raised by the NRC, including access to water and how to better protect cultural values. DPIE will ensure ongoing engagement with Traditional Owners, communities, and relevant stakeholders for the best possible outcomes on Country.	
		ii. ii) Changes to Clause 48(1)(A) will be based on the Border Rivers Risk Assessment developed which was developed to meet the requirements	

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		of the Basin Plan.	
R12	In the Plan remake, to address risks to town water security, including during dry periods, DPE-Water should:	a) The NSW government policy approach is that the implementation of new or enhanced environmental flow conditions are required where infrastructure is	a) in the plan remake it is proposed to permit applications for dams in 3 <sup>rd</sup> order streams built only for the purpose of TWS. This
	a) assess the adequacy of access rules for local water utilities	augmented. That approach ensures that LWUs have adequate opportunity to strategically assess all options to ensure continuing water security,	changes the current prohibition in the Tenterfield Creek, Mole River and Glen Innes Water Sources.
	b) assess the adequacy of access rules for unregulated river access licences to prioritise town water supply and basic landholder rights	ensuring decisions are community based, affordable and sustainable. The Safe and Secure Water Program is the government's key infrastructure program targeted at improving town water security.	b) – e) See DPE Water response
	c) revise Plan provisions to protect town water supply and basic landholder rights in accordance with the Act	b) & c) Local Water Utility access licences, domestic and stock licenses have priority over all other access licences (s58(1) WMA and cl33 of the BR WSP). In times of water shortages the department restricts the take of lower priority users so LWUs and domestic and stock users can continue to take	
	d) revise Plan provisions to include appropriate first flush triggers consistent with recommendations in the Independent Panel Assessment of the Management of the 2020 Northern Basin First Flush Event 2020	the water they need to service their communities. d) as previously stated access rules will be reviewed using new information where available, including the need for first flush rules to be implemented.	
	e) work with relevant agencies and local government to understand any ongoing strategic planning around adequate water	e) The WMA/Regulation allows water to be taken in emergency situations such as bushfires and therefore including provisions in the WSP is not warranted. Under its best practice management	

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	supply during bushfires and align plan provisions.	framework, the NSW Government requires local water utilities to develop an Integrated Water Cycle Management Strategy (IWCMS). A key component of the IWCMS is the drought and emergency response contingency plan (DERCP). The DERCP sets out the tactical response measures to ensure the continuity of the water and sewer services under all emergencies that may be encountered by the LWU. The DERCP includes the council's water restriction regime and identifies alternate sources of water, projects to access this water and the trigger points at which decisions and actions are to be made	
R13	In the Plan remake, to improve Plan-specific MER, DPEWater should: a) expedite the finalisation and publication of the water sharing plan evaluation framework and methods manuals and ensure there is multi-agency support and oversight of their implementation b) identify Plan provisions to be informed by planner MER activities c) identify feasible and appropriate resourcing to support ongoing MER	The Department is currently developing A NSW Water sharing plan monitoring, evaluation, reporting and improvement (MERI) system that includes; - MERI framework - prioritisation tool - transferability study - evaluation and monitoring plans DPE Water will work with NSW agencies to ensure an agreed approach to WSP MER Implementation & Reporting to be published by December 2022 . The implementation of any MER programs depends on a defined, long term budget. NSW funding for monitoring, evaluation and reporting of water sharing plan performance is determined by IPART. While every effort is made to maintain a MER program, the ability to implement MER activities is limited by available resources.	See DPE Water response. No further action required.

#	NRC final recommendation	DPE Water response	Action taken for Replacement Plan (June 2023)
	activities in line with the NSW Water Strategy		
	d) specify timely reporting requirements of the results of MER activities to support transparency, public awareness and adaptive management and link this reporting cycles to the review, remake or amendment of the Plan		
	e) identify and address critical knowledge gaps to support adaptive management.		
	f) use the recently developed prioritisation framework to prioritise MER activities based on values and risk, clearly communicating how this framework interacts with monitoring plans and publicly reporting on where and why effort is being targeted.		