

Government response to the Natural Resources Commission recommendations for the NSW Border Rivers Unregulated River Water Sources Water Sharing Plan

This document outlines how the department has responded to the independent review of the Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2012 under S43A of the *Water Management Act 2000*.

Water sharing plans (plans) are statutory instruments under the *Water Management Act 2000* (the WM Act). They prescribe how water is managed to support sustainable environmental, social, cultural and economic outcomes. They intend to provide certainty regarding rules for water sharing for water users over the life of the plan, which is typically 10 years unless it is extended.

The Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2012 (the initial plan) was due to expire on the 30 June 2022.

The Natural Resources Commission (NRC) has a role under Section 43A of the WM Act to review plans within five years of expiry and report to the Minister on:

- the extent that the plan's water sharing provisions have materially contributed to the achievement of, or failure to achieve, environmental, social and economic outcomes
- if changes to plan provisions are warranted.

The NRC may recommend extending or replacing the plans depending on its review findings. In this instance the NRC recommended the replacing the plan by no later than 30 June 2024. The [final review report](#) (PDF 2.2 MB) is available on the [NRCs website](#).

The recommendations and suggested actions arising from the NRC review and how the Department of Climate Change, Energy, the Environment and Water (the department) has responded are listed below.

NRC Recommendations

Recommendation 1

The plan should be:

- a. extended for up to two years until 30 June 2024, to allow time to complete data collection and analysis, consultation, and development of amended provisions
- b. replaced by 1 July 2024 at the latest, supported by the completion of the recommendations of this review.

Department response to 2022 review

The replacement plan is scheduled to commence on 1 July 2024.

Action taken to address NRC recommendation

A replacement plan, the *Water Sharing Plan for the NSW Border Rivers Unregulated River Water Sources 2024* (the new plan), was made under section 50 of the *Water Management Act 2000* and commenced on 1 July 2024.

Recommendation 2

The Department of Planning and Environment - Water (DPE - Water)¹ 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 to ensure sustainable extraction.

This should include:

- a. preparing accurate estimates of historic extraction to allow calculation of up-to-date LTAAELs
- 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

¹ Note: All references to the Department of Planning Industry and Environment – Water, DPIE-Water, the Department of Planning and Environment or DPE - Water refer to the NSW government Water Group, which is currently known as the Department of Climate Change, Energy, the Environment and Water – Water Group (DCCEEW - Water).

- c. ensuring LTAAELs and other plan 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 streamflows and water access during the most recent drought (2017 to 2019)
- 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 recorded in the WaterNSW Water Licensing System
- e. updating the estimated requirements for water for basic landholder rights in Part 5, Division 2 of the Plan (requirements for water for basic landholder rights) including volumes of domestic and stock rights, native title rights and harvestable rights.

Department response to 2022 review

- a. Partially agree. The Long Term Average Annual Extraction Limits (LTAAELs) were based on the best available information at the time the plan was developed. Reviewing the information used to calculate LTAAELs for inland unregulated water sharing plans would require agreement that the work is a priority and can be resourced. Any changes to the LTAAELs would need to be negotiated with the Commonwealth Government as it would have implications for the Basin Plan Review and might best be considered in the context of the Basin Plan Review in 2026.
- b. Partially agree. The department acknowledges LTAAEL assessments have not been undertaken for the plan area to date due to a lack of metered extraction information which has presented significant challenges. As part of 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 will significantly improve the department's unregulated LTAAEL and compliance regime. The Basin Plan requires NSW to undertake annual Sustainable Diversion Limit (SDL) reporting for all SDL resource units. The Murray Darling Basin Authority (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. MDBA will report the status of SDL compliance in its annual water take reports.

The coastal sustainable extraction limit project is reviewing extraction limits in unregulated and alluvial systems along the coast. The methods and outcomes of the project will be reviewed and where appropriate applied in the inland unregulated systems in conjunction with any Basin Plan related changes.

- c. Partially agree. The Basin Plan sets an environmentally sustainable diversion limit for each SDL resource unit. NSW has committed to preparing water resource plans which meet the requirements of the Basin Plan, which includes demonstrating that the SDL has been complied with and, where it has not, what action must occur to ensure extractions are reduced below the SDL. This is a requirement of the Basin Plan. 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 SDLs for the NSW Border Rivers Water Resource Plan.
- d. Agree. Updating share components in the water sharing plan is a standard part of the replacement process. The data is taken from the water access licence register.
- e. Agree. The plan provides up to date estimates of basic landholder rights.

Action taken to address NRC recommendation

The department has included a provision in the plan for publication of numeric LTAAELs. Based on this information the Department may amend the plan to include the numeric LTAAEL. Additionally, this numeric LTAAEL must be further considered to determine a sustainable level of take (required considerations set out in the plan). Input from the NRC will be sought in relation to review of adequacy of calculations and method application for this work.

Additionally, the department will consider the outcomes of a current work program informing maintenance of water supply in inland regulated river systems. This is a key piece of work in relation to climate considerations within plans.

b. The department is undertaking 2 pilot unregulated LTAAEL compliance assessments in the Lachlan and Richmond catchments. The method uses the best available information, including remote sensing data, and will be reviewed to include metering data when available. Pending the outcomes of the pilots, the method will be applied to other unregulated water sources. The department has consulted with the NRC on the project plan and intends to consult further on the pilot results, when complete.

D and e. Basic Landholder Rights (BLR) estimates have been updated to more accurately reflect current BLR take. The plan provides up to date estimates of both BLR and access licence share components.

Recommendation 3

Until extraction is measured and LTAAEL compliance is assessed, to adequately protect the priorities of the Act and ensure implementation of the precautionary principles, DPE Water should:

- a. include AWD provisions requiring the minister to consider setting an AWD each year equal to the ratio 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
- 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.

Department response to 2022 review

- a. Disagree. It would be inappropriate to include provisions that fetter the minister's discretion. The plan specifies what compliance action is to occur when extraction exceeds the plan limits, which is reducing Available Water Determinations (AWDs) for lower priority users (i.e., unregulated and/or high flow licence categories). However, the amount of the reduction is not specified in the plan as it varies depending on the amount of exceedance, the licence category driving the growth and results from hydrologic analysis which is peer reviewed. On this basis alone it would be inappropriate to specify set figures for AWD reductions.
- b. Partially Agree. The department will engage with stakeholders as part of the plan remake process where changes to water sharing rules are being considered. LTAAEL compliance assessments are required to be undertaken annually, they are not undertaken as part of plan replacement. Consultation regarding non-compliance with the LTAAEL would be undertaken with licence holders, where it has been determined that extraction has exceeded LTAAEL - this is not done as part of the plan replacement process.

Action taken to address NRC recommendation

No further action taken.

Recommendation 4

In the plan remake, to reduce pressure on low flows and enhance economic opportunities, DPIE-Water should:

- a. investigate and set high flow conditions to facilitate trade into high flow by:
 - i. examining the existing conditions in Schedule 1A for adequacy as a high flow condition and place those licences in a high flow category
 - ii. where no conditions currently exist develop high flow cease to pump conditions
- b. amend Division 2 of Part 8 to allow for the creation of a high flow category
- c. assess the Part 10 access dealing rules and replace the general trade restrictions with specific restrictions only where necessary.

Any changes to trade rules should maintain protections for high value aquatic ecosystems and cultural values.

Department response to 2022 review

- a. Disagree. Schedule 1A lists licences that were determined to have existing *Water Act 1912* access conditions that are more stringent than the access rules applied to water sources through provisions in the plan. It should be noted that these conditions are not necessarily high flow conditions. The conditions listed in schedule 1A will be reviewed to ensure they are appropriate to be included in the schedule as part of the remake process. It is not necessary for these licences to be flagged as high flow for these types of conditions to be effective. The department will review access rules in water sources where low flows are at risk.
- b. Disagree. It should be noted that current unregulated licence holders can extract during high flows. As conversion factors are not permitted in the plan due to Basin Plan restrictions, there is no real incentive for licences holders to convert to a high flow licence. Allowing people to move from low flow extraction into high flow extraction is unlikely to enhance economic opportunities as access will be far less reliable and capital investment to build on farm storages may not be feasible.

- c. Agree. A review of current dealing rules will be undertaken as part of plan remake to improve flexibility for water users by increasing opportunities for trading.

Action taken to address NRC recommendation

A review of the 2012 plan's dealing rules across all water sources and management zones was undertaken. This review considered the dealing rules in the 2012 plan, the macro planning trade framework used in developing the 2012 plan, the risk assessment for the relevant water resource plan area and proposed access rules in the 2024 water sharing plan. A number of changes were recommended to provide some flexibility to water users.

Proposed trade is consistent with the Access Licence Dealing Principles, may provide opportunities for licence holders and may reduce high hydrological stress in some water sources.

Limited trade into Bonshaw, Camp Creek, Campbells Creek, Ottleys Creek, Reedy Creek and Yetman Water Sources is now permitted.

Recommendation 5

In the plan remake, to ensure access is equitable within the plan area and downstream of the plan, DPIE-Water should:

- 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 the plan ensure that licence conditions are required on the licence rather than the works approval, and that conditions are consistently worded and enforceable
- c. include a clause in the revised plan to ensure water is protected during high flow events to meet Barwon-Darling flow targets, consistent with rules in the connected regulated river water sharing plans. Until then, ensure any Section 324 orders intended to protect flows to meet those flow targets adequately address unregulated river access
- d. include provisions to ensure that held environmental water or spilled from the Border Rivers regulated systems is protected from extraction within the plan area and that replenishment flows cannot be extracted for purposes other than domestic and stock basic landholder rights

- e. subdivide the Croppa Creek and Whalan Creek Water Source into smaller managements zones to facilitate development of access and trading rules most appropriate for addressing the localised risks and water management needs
- f. reinstate objectives regarding equitable sharing of water and ensure the plan rules reflect these objectives
- g. review access conditions and revise them as necessary to ensure that they are clear, consistent and enforceable.

Department response to 2022 review

- a. Partially agree. 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 department's 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 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.
- b. Disagree. The mandatory conditions for access rules are applied according to the plan rules. They are applied consistently unless there is an exemption or exclusion from the rule for some reason specified in the plan. Sometimes licence holders need to comply with cease to pump rules which relate to the nominated work 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 licensing products. This will not be undertaken as part of this plan remake.
- c. Partially agree. Access rules for the water sources in the plan will be reviewed as part of the replacement process.
- d. Partially agree. Held Environmental Water (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 will be undertaken take during the replacement process.
- e. Partially agree. Management zones will be established in water sources if they are required to better manage access and trade.
- f. Disagree. It is an object of the WM Act, Section 3(e) 'to provide for the orderly, efficient and equitable sharing of water from water sources'. The WM Act, its regulations and other statutory orders put a framework around the various sharing elements to achieve this.

Water sharing plans are consistent with all these statutory requirements. The economic objectives and strategies in the water sharing plans 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 LTAAELs. LTAAELs set sharing arrangements between the environment and the consumptive pool. Available water determinations and accounting rules set out sharing arrangements (including compliance actions when extraction exceeds plan limit) between licence categories.

- g. Agree. 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.

Action taken to address NRC recommendation

- a. c., e. and g. The department reviewed all access rules for the Tenterfield Creek, Beardy River, Glen Innes, Mole River and Inverell Water Sources. A range of cease to Pump (CtP) flow volumes were investigated and the existing CtP rule of no visible flow at the pump site was replaced with gauge-based access rules in water sources where a suitable telemetered stream gauge was available with accurate data readings. The analysis determined suitable telemetered gauges were not available for the Tenterfield Creek and Beardy River Water Sources. The Mole River and Inverell Water Sources did have an available gauge with accurate data, but the gauge was not appropriate to manage access for the entire water source given its location. The subdivision of these water sources was investigated, and management zones were established. Cease to pump rules at the gauge were applied to the upstream management zones. The possibility of subdividing the Croppa Creek and Whalan Water Source was considered but the only region rated to be of high risk in the risk assessment (Boomi River) did not have an active gauge to set access rules. The one active gauge in the water source is located on a river that only flows during floods and the risk assessment rates this region to be of low risk. Trading zones have already been established and current rules restrict trade between these high and low risk zones. As such it was not considered appropriate to set new access and trade rules.
- c. An extensive suite of work is underway across the department to better understand water flow, access and connectivity across the plan region including in the Barwon-

Darling. The outcomes of this work may inform future work to revise the rules in various plans.

- d. The risk of extraction of HEW and replenishment flows sent down the Boomi River were investigated. A risk to extraction of replenishment flows was identified and the plan now protects these from extraction.

The changes to water sources that have been made in the 2024 plan are listed below.

- Glen Innes Water Source - 1 ML/day CtP at the Severn at Fladbury gauge.
- Inverell Water Source – establishment of an Upstream Dintonvale Road Crossing Management Zone with a 1 ML/day CtP at the Macintyre at Inverell gauge and a Downstream Dintonvale Road Crossing Management Zone that retains the current rule that requires a visible flow at the pump site. The existing trading zones have also been further split to align with the new management zones.
- Mole River Water Source – establishment of a Management Zone 1 with a 1 ML/day CtP at the Deepwater at Bolivia gauge and a Management Zone 2 that retains the current rule of no visible flow at the pump site.
- Boomi River Water Source – establishment of a rule that prevents replenishment flows from being extracted.

Recommendation 6

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 Aboriginal needs. This should include:

- a. consulting with the Traditional Owners of Boobera Lagoon, including the Boobera Lagoon Reserve Land Manager to develop a comprehensive understanding of Aboriginal values 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
- 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
- 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

- 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 to the Boobera Lagoon.

Department response to 2022 review

- a. b. and d. Agree. Through the Aboriginal Water Program (AWP) the department intends to work more closely with NTSCORP² (the Native Title representative body for NSW) and Native Title holders. The AWP is to develop an online keeping place for knowledge about Aboriginal water dependent cultural sites, where the existing and new information can be held. The department is updating its plan templates including the provision for amendments to allow for protection of water-dependent Aboriginal cultural assets. The department is also 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. The department will ensure ongoing engagement with Traditional Owners, communities and relevant stakeholders for the best possible outcomes on Country. The Aboriginal Water Strategy engagement will commence in early 2024 and conclude late 2024. The final strategy will include an implementation plan and state-wide actions. Different options for how to provide access to water are being investigated as part of the Aboriginal Water Strategy and Closing the Gap. The Traditional Owners of Boobera Lagoon will be approached in relation to the replacement water sharing plan.
- c. Partially agree. constraints will be discussed with Traditional Owners. However, any compliance issues sit with the Natural Resources Access Regulator and will not form part of the plan replacement.

Action taken to address NRC recommendation

- a. and c. Two meetings with the Toomelah Aboriginal Group were arranged but did not take place due to Sorry business within the community. Two Gomeroi Elders were contacted by the department's Water Group Cultural Officers. Both indicated concerns regarding floodplain works were resolved as per the Floodplain Management Plan.
- b. and d. No action taken.

² NTSCORP Limited is the Native Title Service Provider for Aboriginal Traditional Owners in NSW and the ACT.

The pilot Cultural Watering Plan program has commenced which will enable the department to gain a better understanding the Cultural (and other) watering needs of Aboriginal communities and highlight opportunities and barriers to achieving the desired outcomes. Insights from the pilot plans will be used to better inform policy and planning decisions to make water more accessible for Aboriginal people.

The Regional Aboriginal Engagement team is dedicated to improving consultation with Aboriginal stakeholders on water management and planning. The team has established 12 Regional Aboriginal Water Committees across NSW. The purpose of the committees is to give greater recognition to Aboriginal water rights and interests, ensuring Aboriginal people can contribute to water management.

The department is committed to improving information provided to First Nations people about water management and access. Improved information and communication materials fosters informed participation in engagement processes and builds greater awareness of water access mechanisms. This is in line with the principles of free, prior and informed consent (FPIC) as outlined in the dept's Indigenous Cultural and Intellectual Property (ICIP) Protocol.

The Aboriginal Water Strategy is set to provide the strategic direction to the commitments made by the department. It is proposed to be guided by 4 key priorities which are to:

- strengthen the role of Aboriginal people in water planning and management
- provide Aboriginal ownership of and access to water for cultural and economic purposes
- work with Aboriginal people to maintain and preserve water-related cultural sites and landscapes
- work with Aboriginal people to improve shared water knowledge and build capacity.

The co-design of the strategy will commence in 2024 with Regional Aboriginal Water Committees and Peak Aboriginal Organisations. There will be an opportunity for the public to provide input before its intended finalisation by the end of 2024.

Recommendation 7

In the plan remake, to improve protection of cultural values and assets, DPE-Water should:

- a. embed rules to achieve actions in the NSW Water Strategy relating to Aboriginal People's rights and values and increase access to, and ownership of, water for cultural and economic purposes, and specifically for Boobera Lagoon

- 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
- 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 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.

Department response to 2022 review

- a. Agree. Development of the Aboriginal Water Strategy engagement will commence in early 2024 and conclude late in 2024. The final strategy will include an implementation plan and state-wide actions.
- b. Disagree. Requirements for native title are negotiated outside of the water sharing plan replacement process. The water sharing plan will reflect requirements for water that are part of a determination.
- c. Agree. The Aboriginal Water Program (AWP) is to develop an online keeping place for knowledge about Aboriginal water dependent cultural sites, where the existing and new information can be held. While this information was not available to be considered during the replacement of this plan, it will be an important piece of information as we replace plans in the future.
- d. Partially agree. The department will further investigate water sharing arrangements for Boobera Lagoon to ensure cultural values are adequately protected.

Action taken to address NRC recommendation

- a. and d. See response to Recommendation 6.
- b. The department emailed NTSCORP to invite the Western Bundjalung Nation to meet and discuss upcoming changes to the water sharing plan and any risks to Boobera Lagoon that can be managed by the water sharing plan. No response was received.
- c. No further action taken.

The updated protections provided to significant wetlands have been applied to Boobera Lagoon. See response to Recommendation 9.

Changes to Aboriginal cultural specific purpose access licences have been made to clarify that any secondary or incidental commercial benefit gained from take under an Aboriginal cultural access licences is permitted.

The native title determination for the Western Bundjalung People (Parts A and B, National Native Title Tribunal references NCD2017/002 and NCD2018/001) have been included in the plan.

See Government action on Cultural water plans, establishment of Aboriginal Water Committees and the upcoming Aboriginal Water Strategy outlined in Recommendation 6.

Recommendation 8

In the plan remake, to improve environmental outcomes, DPE-Water should:

- 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
- 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:
 - 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
 - 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
 - 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
 - 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.

Department response to 2022 review

- a. Agree. The department recently completed a review of our hydrometric networks in the Murray-Darling Basin, in collaboration with WaterNSW. The review assessed the 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.
- b. Agree. Access rules for the water sources in the plan will be reviewed as part of the replacement process.

Action taken to address NRC recommendation

- a. and b. See action undertaken in Recommendation 5 and Suggested Action 3.
- b.
 - i. First flush rules were examined for the Tenterfield Creek and Mole River water sources. The draft plan for consultation proposed establishing a 24 hour first flush rule in Management Zone 2 of Mole River Water Source. However, feedback during public exhibition opposed the rule. Investigation into issues raised found that it had potential fairness and compliance issues. There was also limited evidence that the proposed first flush (freshes protection) rule would protect the low and base flows that are at high risk. The risk assessment indicated the Mole River Water Source has a low risk with respect to freshes. The 24 hour first flush rule for Mole River was removed post public exhibition. The 24 hour first flush rule for Tenterfield Creek in the 2012 plan has been retained.
 - ii. iii, and iv. No further action taken.

Recommendation 9

In the plan remake, to strengthen the protection of regionally significant wetlands, DPE Water should:

- 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
- 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 Border Rivers Long Term Water Plan and fish and flows work)
- c. update rules where necessary to adequately protect identified wetlands and lagoons.

Department response to 2022 review

- a. Agree. The department's Water Group will continue to work with the department's Biodiversity, Conservation and Science Group and DPI Fisheries to identify regionally significant assets including wetlands at risk, to improve environmental outcomes.
- b. Agree. Risk assessments assess risk to wetlands and lagoons by including Endangered Ecological Communities in the High Ecological Value Aquatic Ecosystem (HEVAE) and consequence assessments. The outcomes of the risk assessment will be considered as part of the remake process.
- c. Agree. Access and trading rules will be reviewed using the most up to date information.

Action taken to address NRC recommendation

The department developed a draft policy to improve the protection of significant wetlands. As part of this process a method for identifying significant wetlands was developed using existing wetland mapping datasets refined by local knowledge. New rules have been adopted in the 2024 plan. These rules better protect significant wetlands by prohibiting new surface water works and trades into and within 3 km upstream of internationally significant (Ramsar) wetlands and into other significant wetlands. Trade will continue to be allowed between licences/works within the same significant wetland.

Recommendation 10

In the plan remake, to ensure environmental releases can be made from in-stream structures, DPE-Water should use best available information to:

- a. assess current dams and weirs and their ability to deliver environmental flows downstream
- b. determine any necessary infrastructure upgrades to deliver environmental flows and support fish movement and determine which water supply dams and weirs are a priority for modification to improve environmental outcomes

- c. identify suitable, outcomes-focused environmental flow regimes for priority dams and weirs and ensure these are reflected in plan rules and licence conditions.

Department response to 2022 review

Disagree. Specific conditions are applied to work approvals when they are granted. Assessing town water supply (and other) dams and weirs for their ability to deliver environmental flows is not undertaken as part of the process of remaking a water sharing plan.

Action taken to address NRC recommendation

No further action taken.

Recommendation 11

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 protect these values from instream dams.

Department response to 2022 review

- d. Partially agree. 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. The department has processes in place to incorporate new scientific information into water sharing plan replacements, including collaboration with DPI Fisheries as part of the development of the HEVAE and risk assessment for the plan areas. Review of Cease to Pump (CtP) thresholds considers a range of scientific information including EWRs described in the Long Term Watering Plan (LTWP), where appropriate. However, LTWPs aren't designed to develop water sharing rules, they are required under the Basin Plan to guide implementation of the Basin Watering strategy. They prioritise ecological assets and include targets which inform the management of water across the Basin. In many cases it is not appropriate to align access

rules in unregulated water sources with EWRs as they are not achievable under 'baseline' conditions. There would likely be significant impacts on licence holders in unregulated systems where water has not been recovered and cannot be actively managed to achieve EWR targets. Often EWRs are either absent or defined in a manner that is not measurable in these areas. It is also difficult to align CtP rules with EWRs in unregulated systems as there is generally limited gauging and a lack of flow information. The department will continue to work closely with DPI Fisheries and the department's Biodiversity, Conservation and Science Group to develop access rules to improve environmental outcomes where required.

- a. Agree. The NSW Border Rivers surface water quality management plan refers to the Local Land Services (LLSs) North West and Northern Tablelands Local strategic plans 2016-2021 as the appropriate plan for the implementation of land management actions that will assist in improving water quality. There is limited ability to resolve land management issues such as erosion due to bushfire impacts through the plan in an unregulated system. Measures adopted to improve connectivity and protect low flows may assist in protecting water quality.
- b. Partially Agree. Changes to Clause 48(1)(A) of the 2012 plan will be based on the Border Rivers Risk Assessment which was developed to meet the requirements of the Basin Plan.

Action taken to address NRC recommendation

- a. The Risk Assessment and plan were reviewed to ensure all water sources assessed to be of high instream value have restrictions that do not permit the construction of an in-river dam on third order or higher stream. No additional water sources were included as a result of the review.
- b. and c. No further action taken.

Recommendation 12

In the plan remake, to address risks to town water security, including during dry periods, DPE-Water should:

- a. assess the adequacy of access rules for local water utilities
- b. assess the adequacy of access rules for unregulated river access licences to prioritise town water supply and basic landholder rights

- c. revise plan provisions to protect town water supply and basic landholder rights in accordance with the [WM] Act
- 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
- e. work with relevant agencies and local government to understand any ongoing strategic planning around adequate water supply during bushfires and align plan provisions.

Department response to 2022 review

- a. Partially agree. Town Water Supply (TWS) entitlement will not be reviewed as part of plan replacement. 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 regulatory requirements, which can include new or enhanced environmental flow conditions where appropriate. The department's regional water utilities team works closely with Local Water Utilities (LWUs) and other organisations to assist with these discussions and negotiations. The outcomes may include ensuring work is undertaken to upgrade infrastructure or reviewing conditions on the licence.
- b. and c. Agree. Access rules will be reviewed where irrigation is having impact on TWS reliability.
- d. Partially agree. Access rules for the water sources in the plan will be reviewed as part of the replacement process. The department's current policy is that Planned Environmental Water (PEW) is re-regulated when it flows into a different water source. Implementing this recommendation would require a significant policy change.
- e. Disagree. The WM Act and the *Water Management (General) Regulation 2018* allows water to be taken in emergency situations such as bushfires. Therefore, including provisions in the plan is not warranted. Under its best practice management framework, the department 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. Note the department has reviewed the

regulatory framework applying to the take of water to prepare landholdings for an imminent bushfire and fight an active fire. We are trying to find a way for landholders and occupiers (including community groups) to be able to take small volumes of water for this purpose in a cost-effective way, while acknowledging the need to manage the impacts of any additional water take on the environment and other water users.

- f. We have prepared a proposed package of changes in collaboration with the NSW Rural Fire Service and other water-agency partners. The department is seeking feedback from the community before the final proposal is considered by the NSW Government.

Action taken to address NRC recommendation

Changes to access rules are described in the response to Recommendation 5. The ability for local water utilities to construct in-river dams was reviewed.

As with all inland unregulated plans it is proposed to permit applications for dams on 3rd order or higher streams built only for the purpose of Town Water Supply (TWS). This means for the Beardy River, Bonshaw, Camp Creek, Campbells Creek, Croppa Creek and Whalan Creek, Glen Innes, Mole River, Ottleys Creek, Reedy Creek and Tenterfield Water Sources, applications for in-river dams for TWS only will be permitted.

The department is undertaking a review of the water management framework in relation to bushfire preparedness and firefighting.

Recommendation 13

In the plan remake, to improve plan-specific MER, DPE-Water 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 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.

Department response to 2022 review

Agree. The department is currently developing a Water Sharing Plan Evaluation Program that includes:

- Monitoring, Evaluation, Reporting and Improvement (MERI) framework
- A prioritisation tool
- Evaluation Methods Manuals, and
- Evaluation and monitoring plans.

The department is working with NSW agencies including the NRC to ensure an agreed approach to water sharing plan Monitoring Evaluation and Reporting (MER). Implementation of the framework will commence in 2024 beginning with evaluations for water sharing plans due to reach plan term in 2026/27.

The implementation of any MER program is dependent on having a defined, long term budget. While every effort to maintain a MER program, the ability to implement aspects in a MER plan is limited by resources.

Action taken to address NRC recommendation

Implementation of the MER program will commence in 2024. This will clarify the roles and responsibilities, reporting requirements, governance arrangements and timeframes associated with the program. Social, economic and environmental outcome evaluation methods have been developed and applied to pilot surface water plans and reviewed by the NRC. Work has now commenced on expanding method statements to include groundwater specific components. NSW also undertook the first benchmarking survey to collect primary data that informs evaluation of social outcomes of plans. Data was collected from communities and water users across all plan areas.

The department, as part of plan provisions, has added a requirement for the Minister to prepare a monitoring, evaluation and reporting (MER) plan. The MER plan is to be published by 30 June 2025 and each year the Minister is to publicly report on the implementation of the water sharing plan, including progress against the MER plan. Additionally, evaluation reporting is to be undertaken by year nine of the water sharing plan.

Suggested Action 1

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.

Department response to 2022 review

See responses to recommendations 2 and 3.

Action taken to address NRC recommendation

No further action taken.

Suggested Action 2

To improve transparency for water users and ensure extraction estimates are accurate, DPIE-Water should:

- 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 harvesting modelling
- 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
- 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
- d. undertake investigations to determine the volume of water taken under harvestable rights in the Plan area.

Department response to 2022 review

- a. Disagree. In NSW take from runoff harvesting dams (excluding basic landholder rights) 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

Floodplain Harvesting licences. It is not a comprehensive record of take from dams, and its use will be limited.

- b. See response to Recommendation 2c.
- c. See response to Recommendation 2d.
- d. Agree. The department acknowledges the importance of accurately estimating all forms of take. A better understanding of harvestable rights would improve the overall estimate for basic landholder rights. However, any additional work in this area would need to be considered as part of the department's work priorities and broader work program.

Action taken to address NRC recommendation

No further action taken.

Suggested Action 3

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.

Department response to 2022 review

The department recently completed a review of our hydrometric networks in the Murray-Darling Basin, in collaboration with WaterNSW. The review assessed 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.

Action taken to address NRC recommendation

Investigation into the gauge at Neeworra was undertaken. Flow information was not available in time for this replacement Plan process but the gauge will be reinstated and could be used in the future to set access rules and enable better understanding of flows in the Boomi River.

A recent review by the Hydrometric Network and Remote Sensing Program has confirmed the Boomi at Neeworra (416028) and the Boomi at Kanowna (416029) gauges that were previously decommissioned will be re-established to measure height and flow. This work is underway and is not likely to be completed for several years.

Suggested Action 4

To improve protection of Aboriginal values at Boobera Lagoon, and for other water dependent cultural assets, DPE-Water should:

- a. amend the pools policy to give greater priority to protecting Aboriginal values including those associated with Boobera Lagoon
- 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)
- c. install a continuous height recorder and 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
- 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
- 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.

Department response to 2022 review

- a. Agree. 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. The department, through the Aboriginal Water Program (AWP), intends to work more closely with NTSCORP (the Native Title representative body for NSW) and Native Title holders. This work will inform how current policies, such as the pools policy, should be amended to improve protection cultural assets. The timing for developing an Aboriginal Water Strategy is unlikely to align with the timing

for plan replacement, however consideration will be given in the replacement process as to whether additional rules to protect Boobera Lagoon are necessary.

- b. Agree. Before determining if changes to the groundwater sharing plan would support the Aboriginal values associated with Boobera Lagoon we need undertake further investigations. Based on existing information and knowledge shared between the department and Aboriginal people we will assess:
 - i. the connectivity between groundwater and the Boobera Lagoon
 - ii. the risks arising from groundwater extraction
 - iii. how existing groundwater sharing rules mitigate the risks, and
 - iv. 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 the end of 2027) in time to consider if changes to the groundwater sharing plan are appropriate before the groundwater sharing plan expires in 2030.

- c. Disagree. The department has committed to reviewing the water sharing rules for Boobera Lagoon to ensure it is adequately protected. However, the department cannot commit to installing infrastructure that has not been funded.
- d. Agree. See b. but note that this work is out of scope for the replacement of the surface water sharing plan.
- e. Agree. The department will engage with relevant agencies as required during the plan remake.

Action taken to address NRC recommendation

During replacement plan development, two meetings with the Toomelah Aboriginal Group were arranged but did not take place due to Sorry business within the community. Two Gomeroi Elders were contacted by the department's Water Group's Cultural Officers. Both indicated concerns regarding floodplain works were resolved as per the Floodplain Management Plan.

The 2024 Plan provides additional protections to significant wetlands including Boobera Lagoon. See response to Recommendation 9.

See related response to Recommendation 7.

Suggested Action 5

In the plan remake, to improve recognition and protection of cultural values and assets, DPE-Water should update the background document to:

- a. recognise the specific native title rights of the Western Bundjalung People as they relate to water in the Tenterfield Creek Water Source
- b. recognise the native title rights claimed by the Gomeroi People as they relate to water
- c. include comprehensive discussion of Aboriginal cultural values and assets and describe how the plan rules have been prepared to protect and enhance them
- d. define native title rights to be consistent with the definition in the Native Title Act 1993.

Department response to 2022 review

Agree. Through the Aboriginal Water Program (AWP) the department intends to work more closely with NTSCORP (the Native Title representative body for NSW) and Native Title holders.

- c. Partially Agree. The background document for this plan will be amended with relevant information to explain the reasons for changes to the plan.

Action taken to address NRC recommendation

The background document for this plan was amended with relevant information to explain the reasons for changes to the plan.