

Our ref: BN24/5404

Your ref: INT24/73283 and INT24/73284

Professor Hugh Durrant-Whyte
Commissioner
Natural Resources Commission
GPO Box 5341
SYDNEY NSW 2001

By email: Hugh.Durrant-Whyte@nrc.nsw.gov.au

24 July 2024

Subject: **Audit of implementation of the Hastings and Bellinger unregulated and alluvial water sharing plans and Paterson regulated river water sharing plan**

Dear Professor Durrant-Whyte

I refer to your letter of 25 June 2024 concerning the audit of the implementation of the Hastings and Bellinger unregulated and alluvial water sharing plans and Paterson regulated river water sharing plan (WSPs or the Plans).

It is pleasing to note that the report included positive findings in relation to available water determination orders were largely issued and applied to accounts as required by the Plans; procedures and systems were generally in place to support the granting of specific purpose access licences, making of plan amendments, processing of dealings and implementing changes in mandatory conditions, but with some limits identified, relevant NSW Government bodies are continuing to make updates to their processes for water supply works approvals to address concerns raised by these, previous audits undertaken by the Commission; and mandatory conditions were largely applied as required by the Paterson Plan, with some gaps around metering and recording requirements.

It is also accepted that there are several areas where further work is required.

The Department of Climate Change, Energy, the Environment and Water – Water Group (DCCEEW Water Group or the department) has considered each of these findings and recommendations with suggested actions, and our detailed response is in the attached tables. Eighty-nine per cent of these recommendations are fully or partially agreed and accepted.

The minor exceptions to this are the recommendations in relation to the below findings (see enclosed documents for full details):

1. F5.1 data displayed in the WaterInsights Portal.
2. F8.1 clauses 44(25) and 44(26) regarding in-river dam pools and runoff harvesting dam pools.

In finalising the audit, the NRC consulted the department on the draft responses where the department had partially agreed with either the finding or recommendation and noted the following progress

1. In relation to R1.1 (Hastings, Bellinger and Paterson Plans) the NRC noted that the DCCEEW Water Group has reviewed and since implemented actions following the audits. NRC has updated its recommendation 'finalise development' for the report.

2. In relation to R2.1 (Hastings and Bellinger Plans)/R3.1 (Paterson Plan) the NRC revised the recommendation for the Long Term Average Annual Extraction Limits (LTAAEL) and assessment the compliance should be supported by specific water use data and other assessments methodologies where required for the Hastings, Bellinger and Plans
3. In relation to R5.1 (Hastings and Bellinger Plans)/ the NRC noted DCCEEW – Water Group resourcing and revised the recommendation be progressed ‘over time considering resourcing requirements and competing priorities.
4. In relation to R8.1 (Hastings and Bellinger Plans) and the NRC revised recommendation includes ‘amending discretionary conditions’ or ‘amending plans’ to ensure all relevant mandatory conditions are applied to all licences. For the Paterson Plan, the NRC note DCCEEW Water Group will complete work to notify licence and approval holders of mandatory conditions. The revised recommendation notes the draft procedure includes a ‘notification date’ will be agreed and documented.
5. In relation to R8.3 (Hastings Plan) the NRC revised recommendation notes DCCEEW Water Group will address gaps in application of mandatory conditions through ‘water metering reforms’.

The department has already undertaken work to finalise actions against these recommendations post the audit being completed.

The department is also progressing work that will contribute to addressing matters identified in this and other audits including:

1. development of monitoring and evaluation frameworks for water sharing plans which will inform plan assessment and monitoring (Recommendation R1.1 – Hastings, Bellinger and Paterson Plans)
2. monitoring of economic and social performance indicators commenced, for water quality evaluation reports that the department is finalising (Recommendation R1.2 – Hastings, Bellinger and Paterson Plans)
3. rolling out a method that uses remote sensing data to determine water take, in accordance with LTAAEL requirements (R2.1 – Hastings and Bellinger Plans)
4. updated mandatory conditions for the system operation rules and reviewing discretionary conditions (R2.1a – Paterson Plan)
5. processes relating to granting access licences (Recommendations R4.1 – Paterson Plan)
6. procedures and systems relating to water supply work approvals (Recommendations R6.1, R6.3a – Hastings and Bellinger Plan)
7. notification of mandatory conditions (Recommendations R8.1, R8.2 – Hastings, Bellinger and Paterson Plans)

The department continues to work collaboratively with WaterNSW to ensure consideration and implementation of NRC recommendations.

I understand that WaterNSW is reviewing the NRC audit report and is in the process of developing actions to address the six recommendations assigned to them for the Paterson

**Department of Climate Change, Energy
the Environment and Water**



Plan and the seven recommendations assigned to them for the Hastings and Bellinger Plans. Where joint actions are required, WaterNSW commits to working with the Department of Climate Change, Energy, the Environment and Water (DCCEEW) in the implementation of these recommendations. A further separate response will be provided by WaterNSW, including a more detailed description of the proposed actions and realistic timeframes to address the recommendations.

The outcomes of this work, along with the Commission's audit, will inform the next steps in relation to these management plans. If your office requires any additional information or to discuss these matters further, please contact Giselle Howard, Executive Director, Water Planning, in the department, at giselle.howard@dpie.nsw.gov.au.

I would like to thank the Commission for its work in this important process.

Yours sincerely,

A handwritten signature in black ink that reads "Amanda Jones".

Amanda Jones
Deputy Secretary Water
Water Group

ENCL

- Final audit findings and recommendations relevant to DCCEEW Water for Hastings and Bellinger Plans
- Final audit findings and recommendations relevant to DCCEEW Water for Paterson Plan

Attachment E

Table 1: Audit findings and recommendations relevant to DCCEEW Water

- Water Sharing Plan for the Paterson Regulate River Water Source 2019 (Paterson Plan)

No.	Final Findings	No.	Final Recommendations	DCCEEW Water response
F 1.1	DCCEEW is investing substantial effort into the monitoring, evaluation and reporting (MER) of water sharing plans. Progress has been made in developing processes and systems to track performance indicators. However, the MER framework and method statements have not been finalised. Methods manuals are to be developed for environmental MER plans (in draft), socio-economic MER plans (finalised), and cultural MER plans (not yet developed). Draft methods statements for tracking of environmental and water quality outcomes indicates that the types of key evaluation questions may vary according to evaluation effort ranking given to a plan. The auditor did not receive information on evaluation effort for the Plan.	R 1.1	DCCEEW to finalise development of systems and processes to facilitate monitoring of performance indicators established in the Plan and enable evaluation of the Plan's performance against its objectives.	<p>Partially Agree with finding Method manuals have been finalised for evaluating surface water environmental, water quality social and economic outcomes. Methods for groundwater outcomes are currently being developed. Methods to evaluate outcomes for First Nations have not yet commenced.</p> <p>Agree with recommendation As part of the NSW Water Sharing Plan Evaluation Program the department has developed a draft water sharing plan evaluation framework. Methods for the evaluation of social, economic, environmental and water quality have been finalised for surface water resources. An update of the social and economic method and an additional environmental and water quality method to include groundwater resources are currently being developed and tested and will be finalised by December 2024.</p>

F 1.2	<p>Some monitoring and data collection is occurring across the Plans to enable monitoring against performance indicators, including sampling of extent of fish and platypus species and changes to groundwater dependent ecosystems. However, existing monitoring has gaps across environmental, economic, Aboriginal cultural, and social and cultural performance indicators across the surface water and alluvial water sources of both Plans.</p>	R 1.2	<p>DCCEEW to monitor and evaluate performance indicators to measure the success of the strategies to reach the objectives set out in Part 2 of the Plan, and to use generated data to support decision making for plan implementation.</p>	<p>Partially Agree with finding The department has commenced collection of data to inform evaluation of economic and social indicators. Examples of economic indicators include data on changes and trends in water trade, industry water use, local economies and industry value. Examples of social indicators include data collected from DCCEEW’s WSP Social Benchmarking survey about amenity, wellbeing, attachment to water and livelihoods.</p> <p>Agree with recommendation The department is leading the collection of social, economic, environmental and water quality performance indicators for water sharing plans in NSW. Monitoring of economic and social performance indicators have commenced, including purchase of customised economic data and NSW WSP Social Benchmarking survey. Monitoring of surface water environmental performance indicators is reported through the Water Science Environmental Outcomes Monitoring and Research Program (EOMRP) with annual reports published on the website. Results and analysis of monitoring information will also used to assess achievement of WSP environmental and water quality outcomes.</p>
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F 2.1	<p>The target environmental flow thresholds used and monitored by WaterNSW (as per the <i>Annual Compliance Reports (ACRs)</i> in 2019-20 to 2022-23 water years) were different to the thresholds specified in the Plan. Thresholds used in the ACR were those specified in the WaterNSW works approval. A lower minimum flow threshold was used by WaterNSW compared to the requirement in the Plan for the time periods March to May, and September to November, noting that a higher minimum flow threshold was used compared to the Plan in the period June to August.</p>	R 2.1a	<p>DCCEEW to update WaterNSW's work approval to align its target environmental flows threshold requirements as identified in Clause 46 of Part 10 of the Plan.</p>	<p>Agree with finding and recommendation The department has updated but not yet notified the mandatory conditions for the system operation rules. The department is also reviewing the discretionary conditions and will notify any changes together. We expect this to be completed by end July 2024.</p>
		R 2.1b	<p>Once DCCEEW has updated the work approval, WaterNSW to update its systems and procedures to ensure it is operating in accordance with the correct thresholds as specified in the updated work approval.</p>	
F 2.2	<p>Shortfalls of the target environmental flows identified in the 2019-20 water year were subsequently delivered in the following days as specified in the ACR 2019-20. Water used to redress the flow deficits in the 2019-20 water year were mostly sourced from the Lostock Dam, but some additional flows were from the Allyn River (a tributary of the Paterson River) to make up the remainder of flows. This is not in compliance with Clause 46(3) regarding use of tributary inflows to redress environmental flow shortages.</p>	R 2.2	<p>WaterNSW to manage the water supply system in the Paterson Regulated River Water Source to ensure that tributary inflows are not used to redress environmental flow shortages, in accordance with Clause 46(3).</p>	

F 2.3	<p>Environmental Water Allowance (EWA) rules in Division 2 of Part 10 were partially given effect as there is no specific EWA account kept in the Water Accounting System (WAS) to monitor water credited to, and debited from, the EWA. Annual compliance reports also did not report balances relating to an EWA account.</p> <p>WaterNSW indicated that DCCEEW has work underway to establish EWA accounts across NSW. WaterNSW indicated they have established water order processes which can be used to manage the EWA account once established by DCCEEW.</p>	R 2.3.a	DCCEEW to establish the Environmental Water Allowance account for the Paterson Regulated River.	Agree with finding and recommendation The department will be undertaking a wider project to better monitor the debiting and crediting of discretionary planned environmental water accounts across NSW. This work is yet to be scoped and resourced however it is estimated it will commence in 2024/25 and be finalised in 2025/26.
		R 2.3.b	WaterNSW to use the account established in R 2.3a to manage the Environmental Water Allowance for the Paterson Regulated River as per Clause 48.	
F 2.4	Inconsistencies were noted relating to the environmental flow values captured and the environmental flow thresholds used between the ACR, the Computer Aided River Management (CARM) system and the Plan.	R 2.4	WaterNSW to identify the root cause for the discrepancy noted between the ACR and the CARM system, resolve the discrepancy and notify NRAR accordingly.	

F 2.5	DCCEEW has not established the procedure specified in the Plan to enable WaterNSW to determine and specify the water delivery and channel capacity constraints in accordance with subclauses 52(a) and (b). Despite this, WaterNSW indicated the rules in its works approval contribute to supporting the implementation of this clause. However, the auditor does not consider subclauses 52(a) and (b) to be covered in the work approval and the procedure should still be established by DCCEEW to give effect to the requirements of subclauses 52 (a) and (b).	R 2.5	DCCEEW to establish the procedures to enable WaterNSW to consider, determine and specify the water delivery and channel capacity constraints taking into account clauses 52 (a) and (b).	Agree with finding and recommendation Max Lostock release capacity 720 ML/day. While unlikely to create issues (no historical evidence of issues), the water sharing plan requires a procedure to be prepared. Timeframe for this procedure development is Dec 2025.
F 3.1	There has been no calculation of annual extraction in accordance with Part 6 (Clauses 25-28) of the Plan. DCCEEW indicated that there is a very low risk of non-compliance with the long-term average annual extraction limit and that the assessment process is described in the Plan.	R 3.1	DCCEEW to manage Long Term Average Annual Extraction Limits (LTAAEL) and assess LTAAEL compliance for the Plan in accordance with Part 6 (Clauses 25-28). This should be supported by: (a) water use data from the rollout of the non-urban metering reforms (b) other assessment methodologies in the absence of comprehensive water use data, if required.	Agree with finding and recommendation The department will undertake to complete an LTAAEL assessment for the Paterson regulated water source for the following water year. a) Not supported - LTAAEL assessment is designed to assess long-term growth in use. Models used in LTAAEL assessment are calibrated against usage data. Note that most water use in the Paterson is already metered, however, many are not compliant with the requirement to be pattern-approved to the Australian standard. b)The department is unclear on what the "interim assessment methodology" is, and requests further information.

F 4.1	<p>There were no resource assessments undertaken on 1 June 2019, 1 June 2020 and 1 June 2021 to support the 100% AWD made for regulated river (high security) and regulated river (general security) access licences at the commencement of these water years, as required in clauses 32(3) and 33(2) of the Plan.</p> <p>In years where resource assessment calculations were used prior to making AWDs, calculations did not explicitly cover all the Plan requirements before making AWDs for regulated river (high security) and regulated river (general security) access licences.</p>	R 4.1	<p>DCCEEW to complete resource assessment calculations incorporating the Plan requirements prior to making Available Water Determinations. The resource assessment calculations should assess all elements required in clauses 32(3) and 33(2) of the Plan. To support this, and for transparency, DCCEEW to review and complete the Resource Assessment Summary Manual for public release and align the resource assessment spreadsheets with the published manual, ensuring elements in clauses 32(3) and 33(2) are explicitly captured.</p>	<p>Agree with finding and recommendation Resource assessments have been undertaken since the audit period in accordance with the water sharing plan. In addition the draft Summary Manual will soon be finalised and published by Dec 2024.</p>
F 6.1	<p>The supplementary event provisions in Clause 39 were not given effect based on the following: § WaterNSW monitors the flows in the water source at the Paterson River downstream of Lostock Dam gauge (210021). However, the flows (ML/day) monitored downstream of Lostock Dam (prior to announcing a supplementary water event) as per the ACRs specifies "40 or 2S" (ML/day) (where "S" is the volume of the total installed pump capacity for water supply works nominated on a supplementary access licence in the Paterson Regulated River Water Source, (100 ML current capacity)), are not compliant with</p>	R 6.1a	<p>WaterNSW to calculate the maximum volume of water that may be taken and/or limit of the extraction (taking into account the trigger for commencement and cessation) before a supplementary water event is announced.</p>	

subclauses 39(2) or 39(3), which specify that supplementary water events must commence and cease when the flows in the water source at the Paterson River downstream of Lostock Dam gauge has exceeded 40 ML/day for at least 12 hours or have decreased below 40 ML/day, respectively.

§ There were no calculations made on the maximum volume of water that may be taken for the supplementary events announced during the audit period using the formula in clause 39(4).

§ None of the six supplementary water flow access announcements met the requirements of 39(5) and 39(6)(b), which both require an extraction limit (or the amount of water that may be taken). Clause 39(6)(a) requires announcements to include the start or end date, or both, of the supplementary water event. Four out of the six announcements specified the start time and date of the supplementary event while two of the six announcements did not specify in the body of the announcement the start date. None of the announcements included the end date of the supplementary water event. For the two announcements that did not include a start or end date, the auditor deemed the date of the announcement as the start date. Hence, clause 39(6) was partially complied with.

		R 6.1b	WaterNSW to specify in the supplementary event announcement the start or end date, or both, of the supplementary water event and the extraction limit or the amount of water that may be taken by each supplementary access licence holders to give effect to Plan clauses 38 and 39.	
F 8.1	DCCEEW's internal Standard Operating Procedure on mandatory conditions applied in bulk to water access licences and approvals is due to be finalised 30 June 2024. The auditor found that the existing access licence and water supply work approval holders were notified of the mandatory conditions after 3 years and 2 months from Plan commencement (31 August 2022).	R 8.1	DCCEEW to complete work to improve systems and processes for notifying licence and approval holders of mandatory conditions, including the Standard Operating Procedure, the draft of which states the notification date will be agreed and documented by WaterNSW and DCCEEW.	Agree with finding Partially Agree with recommendation The departments work on completing the Standard Operating Procedure has been delayed as we have prioritised notifying licence and approval holders of mandatory conditions following plan remakes and amendments. The revised target timeframe is now 30 June 2025, but this is dependent on the magnitude of notifications required ahead of that date and available resourcing. The Standard Operating Procedure does not need to document target timeframes for notification as this is already established by IPART. The delay in notifying the mandatory conditions for the Paterson WSP was not caused by the Standard Operating Procedure not being completed, or the target timeframes for notification not being documented therein.

<p>F 8.2</p>	<p>While sub-clause (9) requires the condition under subclause (4) to have been removed on 1 December 2023, which was intended to align with the roll-out of the non-urban water metering guidelines, subclause (4) was never applied to licences. The Plan clause 59(4) was therefore never implemented as it should have been. Metering conditions under the previous plan (which conveys the same meaning as clause 59(4)) were removed from all approvals when the Plan commenced in 2019. DCCEEW considered the wording of the Plan provision to be too vague to specify as a condition as the Minister had not determined ‘acceptable’ and that therefore a condition should not be imposed. The lack of metering requirements since 2019 on these licences poses a risk to implementing the Plan provisions as intended despite the expected low level of extraction. Further, DCCEEW did not impose a condition related to clause 59(5) on water supply works approvals as there were no relevant procedures established by the Minister. DCCEEW advised this issue was logged using the amendment process in July 2023 and expect this issue to be superseded by the rollout of the non-urban water metering requirements on 1 December 2024.</p>	<p>R 8.2</p>	<p>DCCEEW to develop and implement systems and processes to give effect to mandatory conditions concerning metering equipment, recording and water use details by 1 December 2024, or make plan amendments in cases where conditions specified in the Plan are not sufficiently specific to enable effective conditioning onto licenses or approvals.</p>	<p>Agree with finding Partially Agree with recommendation The department already has procedures for logging and making plan amendments in cases where the plan rule is not able to be conditioned. This issue was logged using this process in July 2023 (reference number PAT-R-19-AMDP-1676). At this stage, we expect this issue will be superseded by the rollout of the metering requirements under the Regulation for this plan area on 1 December 2024.</p>
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