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Your ref: D25/2823

Professor Hugh Durrant-Whyte
Commissioner
Natural Resources Commission
By email: hugh.durrant-whyte@nrc.nsw.gov.au

31 July 2025

Subject: **Audit of the implementation of the Border Rivers and Macquarie Valley floodplain management plans**

Dear Professor Durrant-Whyte,

I refer to your letter of 26 June 2025 concerning the audit of the implementation of the Border Rivers floodplain management plan and Macquarie Valley floodplain management plan (the plans).

It is pleasing to note that the final report included positive findings with elements of the plans being implemented by the Department of Climate Change, Energy, the Environment and Water – Water Group (the department), including:

- improvement in the mandatory conditions criterion, with all required mandatory conditions in place on recent works approvals for both the plans established by the department,
- the intent of the department to progress ongoing improvements to systems and procedures that will assist with the implementation of granting or amending flood works approvals and amendment plan provisions.

It is also accepted that there are several areas where further work is required, including:

- The department to finalise the framework and methods necessary to guide the plans monitoring, evaluation and reporting.
- The department and WaterNSW to update procedures and implement new templates to address gaps in the flood works approvals process to ensure that approvals are not granted for flood works that do not meet the plans requirements.
- The department to update existing internal and public facing documentation for the identification and tracking of amendments for floodplain management plans via the internal NSW DCCEEW-Water Management Hub.

The department has considered each of these findings and recommendations with suggested actions, and our detailed response is in the attached table. All of these recommendations are accepted or accepted in principle.

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

1. finalise the framework and methods necessary to guide Plan MER (Recommendation R1.1)
2. collect data to assess all Plan performance indicators (Recommendation R1.2)
3. update procedures and implement new templates to address gaps and document compliance with the Part 8 rules for flood works approvals (Recommendations R2.1a).

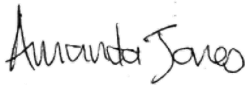
The department continues to work collaboratively with WaterNSW to ensure consideration and implementation of NRC recommendations.

I understand that WaterNSW is reviewing the NRC audit report and is in the process of developing actions to address the four recommendations assigned to them for the plans. A further separate response will be provided by WaterNSW, including their 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 Mitchell Isaacs, A/Executive Director, Water Planning, in the department, at mitchell.isaacs@dcceew.nsw.gov.au.

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

Yours sincerely,



Amanda Jones
Deputy Secretary Water

ENCL

- Final audit findings and recommendations relevant to DCCEEW Water for Border Rivers and Macquarie Valley floodplain management plans.

Table 1: Audit findings and recommendations relevant to DCCEE Water

- *Floodplain Management Plan for the Border Rivers Valley Floodplain 2020*
- *Floodplain Management Plan for the Macquarie Valley Floodplain 2021*

No.	Final Findings	No.	Final Recommendations	DCCEE Water Response
1.1	DCCEE Water does not have an MER framework in place to assess performance indicators. Despite this, DCCEE Water has progressed individual model updates and environmental evaluations for FMPs. The lack of a framework risks gaps and inefficient monitoring and evaluation, potentially impacting Plan outcomes and adaptation over time. As highlighted in the Commission's water sharing plan reviews, evaluation methods and ongoing data collection on Aboriginal cultural values, uses and assets has not been undertaken. The Plans define Aboriginal cultural values as "sites, objects, landscapes or resources that are important to Aboriginal people as part of their continuing culture and beliefs, listed in (a) the Aboriginal Heritage Information Management System, (b) the Murray-Darling Basin Authority Aboriginal Submissions Database, (c) the NSW State Heritage Register, (d) the Commonwealth Heritage List, or (e) any other source that, in the Minister's opinion, is relevant". The Commission highlights the importance of being able to define, monitor and assess plan implementation with respect to Aboriginal cultural	1.1	DCCEE Water to finalise the framework and methods necessary to guide Plan MER, including: (a) develop the NSW Floodplain Management Plan Evaluation Framework (b) complete the floodplain environmental evaluation method (c) develop the floodplain Aboriginal cultural evaluation method.	(a) - (c) DCCEE has developed a draft environmental assessment method that is being applied to Border Rivers and Macquarie Valley FMPs. Further work to scope, develop and implement an evaluation framework and additional methods is wholly dependent on future funding for FMP MER activities. DCCEE is currently not resourced to undertake this work according to the current draft recommendations for WAMC funding by IPART. Should this situation change DCCEE Water can respond. The department accepts the recommendation in principle.

	outcomes to adequately protect features of major cultural, heritage and spiritual significance in line with the principles of the Act. DCCEEW-Water has previously advised they are seeking the required funding to support scoping of the Aboriginal cultural values method. This critical work is required as soon as possible to enable protection and monitoring of Aboriginal cultural assets, values and heritage sites on the floodplain.			
1.2	The Commission does not expect all monitoring and data collection to be complete at this stage of the Plans, however we require evidence of work to enable assessment of performance indicators over the life of the Plans. DCCEEW-Water provided the Commission with a draft modelling update and environmental evaluation reports for the Border Rivers Plan. Despite the lack of a framework described above, the draft environmental evaluation meets some requirements for the Border Rivers Plan. When the equivalent Macquarie Plan reports are finalised mid 2025 they are expected to be similar to the Border Rivers Plan reports, however as they have not yet been completed, they were not available for the Commission to review. The Environmental Evaluation report demonstrates action against some Plan clauses, however there was no evidence provided for progress against the following clauses: - 11 (1)(b)(iii) 'the extent to which flood works, approved in accordance with Part 8 of this Plan, and constructed or modified after the commencement of this Plan, have altered ... flood connectivity to flood-dependent cultural assets and values, including Aboriginal cultural values and	1.2	DCCEEW-Water to collect data to assess all Plan performance indicators, including: (a) accuracy of flood-dependent ecological assets and values, and cultural assets and values, including Aboriginal cultural values and heritage sites (b) alterations of flood connectivity to flood-dependent cultural assets and values, Aboriginal cultural values and heritage sites due to flood works approvals under the Plan.	Collection and assessment of performance indicators is wholly dependent on future funding of MER activities. DCCEEW is currently not resourced to undertake this work according to the current draft recommendations for WAMC funding by IPART. Should this situation change DCCEEW Water can respond. Subject to funding, DCCEEW Water will scope the inclusion of performance indicators listed in (a) and (b) into the environmental evaluation for the Macquarie Valley Floodplain in 25/26 FY. The environmental evaluation for the Macquarie Valley Floodplain will be completed in 25/26 FY. The department accepts this recommendation in principle.

	heritage sites in the Floodplain', - 11 (1)(b)(iv) 'the extent to which flood works, approved in accordance with Part 8 of this Plan, and constructed or modified after the commencement of this Plan, have altered ... the condition of heritage sites in the Floodplain', - 11 (1)(c) 'the extent to which this Plan has accurately identified flood-dependent ecological assets and values in the Floodplain', - 11 (1)(d) 'the extent to which this Plan has accurately identified flood-dependent cultural assets and values, including Aboriginal cultural values and heritage sites, in the Floodplain'			
2.1a	As part of this audit, DCCEEW-Water advised that the processes and procedures have not been updated since the Commission's last FMP audit (Upper and Lower Namoi FMPs, completed January 2023). Given this, the Commission did not review the processes and procedures documents. For this audit sample, the Commission specifically found that while DCCEEW-Water's assessment summary sheets are largely fit for purpose, they do not explicitly require officers to address every clause of the Plans during the assessment process. For example, there is no line in the assessment form to assist with the assessment of specific requirements for supply channels outlined in Clause 36(4) of the Macquarie Valley Plan.	2.1a	DCCEEW-Water to update procedures and implement new templates to address gaps and document compliance with the Part 8 rules for flood works approvals to ensure that approvals are not granted for flood works that do not meet Plan requirements.	DCCEEW Water will continue to progress updates to the technical assessment methods for flood work approvals to fit in with the department's and WaterNSW's assessment processes. This work will be addressed in the 2025/26 FY The department accepts this recommendation.
2.1b	During the audit of the Namoi Valley FMP, completed in January 2023, the Commission recommended WaterNSW to update flood works assessment templates to clearly document all applicable management zones and demonstrate assessment of compliance for all management zones. The Commission reviewed systems and	2.1b	WaterNSW to update procedures and implement new templates to address gaps and document compliance with the Part 8 rules for flood works approvals to ensure that approvals are not granted for	

	procedures used to administer and manage the flood work approval process by WaterNSW. The Commission found that: ▪ WaterNSW has created a Statement of Work template – which lists all flood works subject to the application and their applicable management zone. In addition, WaterNSW attach a separate copy of the legislation to each application, with commentary added on compliance with all relevant zones as a guidance to assessing officers, and the WaterNSW website, giving guidance to our customers on flood study requirements for flood works in Zone C or CU. However, the statement of work template has not been integrated the in current assessment sheets, and the Manual of Work Instruction has not been updated to reflect these changes Water NSW advised that the WaterNSW Flood Work Manual and Work Instruction is currently being updated, and the above will be reflected in an updated version of this manual. ▪ Assessment summary sheets for flood works approvals do not explicitly require officers to address every clause of the Plans during the assessment process. For example, there is no line in the assessment form to assist with the assessment of specific requirements for supply channels outlined in Clause 36(4) of both plans		flood works that do not meet Plan requirements	
2.2	The Commission found that the assessment in general had been undertaken according to Plan requirements. However, it observed that where an individual flood works spanned more than one management zone, DCCEEW-Water and WaterNSW do not apply a consistent approach to the resulting flood works approval in the Water	2.2	WaterNSW to develop the WMS system to allow flood works spanning multiple management zones to be accurately recorded against those zones.	

	Licencing System (WLS) due to system limitations in applying more than one management zone. The Commission identified in these instances that WaterNSW issues a flood works approval without a management zone, and DCCEEW-Water issues a flood works approval in the management zone where most of the flood work is located. WaterNSW is currently implementing a large organisation-wide transition of many of its management systems, including WLS, to Water Market System (WMS). The Commission understands that opportunity exists to capture multiple management zones against an individual flood work approval in the WMS software			
2.3	The Commission sampled the four most recent flood work approvals granted by WaterNSW during the audit period for each of the Border Rivers and Macquarie Plans (eight total) and found that the Plans have clauses requiring modelling of small and large design floods to ensure that flood works “maintain adequate flood connectivity to the following under a range of flood scenarios, including at a minimum, scenarios for the large design floods and small design flood”. The Commission found that there were inconsistencies in the documentation of the modelling used in the assessment of some flood works approvals sampled for this audit. In some audit samples, WaterNSW only used the large design flood scenario where both large and small design flood scenarios were required. In another audit sample, a small design flood was modelled for a different year to that specified by the Plan. This presents the risks that some flood works may not be protected if adequate flood	2.3	WaterNSW assessment form should consistently outline the reason for any change in design flood required by the Plan.	

	modelling is not carried out as part of the assessment process. WaterNSW advised that the variation in the modelling approach was the result of applying the precautionary approach. WaterNSW advised that in some instances, the precautionary approach was appropriate, particularly where the small design flood did not reach the proposed flood works area and was therefore unlikely to have any impact on the proposed work. The Commission observed that while the justification for variance in flood design was presented in the flood modelling report attached to flood works approval applications, this information was not consistently captured in the WaterNSW assessment forms.			
2.4	The Plans require that flood works in Management Zones A, B, C and D should maintain adequate flood connectivity to flood-dependent Aboriginal cultural values, and flood-dependent heritage sites and an assessment against flood-dependent Aboriginal cultural values and lists four databases for checks including: “(a) the Aboriginal Heritage Information Management System, (b) the Murray-Darling Basin Authority Aboriginal Submissions Database, (c) the NSW State Heritage Register, (d) the Commonwealth Heritage List, or (e) any other source that, in the Minister’s opinion, is relevant”. However, both agency’s assessment sheets only document the Aboriginal Heritage Information Management System (AHIMS) and the NSW State Heritage Register searches DCCEEW-Water also advised that following work undertaken during Plan development, an internal DCCEEW-Water database was developed which incorporated all Aboriginal cultural values as	2.4a	DCCEEW-Water to review and make a determination against the Aboriginal Heritage Information Management System, the Murray-Darling Basin Authority Aboriginal Submissions Database, the NSW State Heritage Register, and the Commonwealth Heritage List at a minimum for Aboriginal cultural values when assessing an application for flood work approvals, as required by the Plans.	DCCEEW Water will continue to progress updates to the technical assessment methods for flood work approvals to fit in with the department's and WaterNSW's assessment processes. This work will be addressed in the 2025/26 FY. The department accepts this recommendation.
		2.4b	WaterNSW to review and make a determination against the Aboriginal Heritage Information Management System, the Murray-Darling Basin Authority Aboriginal Submissions Database, the NSW State Heritage Register, and the	

	identified in the Plans Dictionary. This internal database has not been updated since its development due to a lack of resources and a shift towards utilisation of publicly available information for the identification of Aboriginal cultural values. Due to requirements to protect the privacy of cultural intellectual property, DCCEEW-Water has been unable to share the internal database with WaterNSW to date. This has impacted and will continue to impact the ability of WaterNSW to complete the assessment of proposed flood works against the required datasets outlined in the Plan.		Commonwealth Heritage List at a minimum for Aboriginal cultural values when assessing an application for flood work approvals, as required by the Plans.	
4.1	The Commission identified via the legislation website that both the Border Rivers Plan and Macquarie Plan have been subject to amendments since Plan commencement. DCCEEW-Water provided evidence of the amendments register and internal guidance documents that was used to support these amendments. However, DCCEEW-Water indicated it is their intention to adopt the Hub as the system to identify, monitor and track amendments, consistent with the process used for water sharing plans for any future floodplain management plans. The Commission identified that updates to support the amendments process via the Hub are yet to occur. The Commission has observed the use of the Hub, and its ongoing improvement over successive audits and is supportive of the system as a tool for implementation of amendment provisions. To date, internal and public facing DCCEEWWater amendments documentation has not been updated to reflect floodplain management plans, with all guidance material referring to water sharing plans. DCCEEW-Water has indicated that all system level	4.1	DCCEEW-Water to update existing internal and public facing documentation for the identification and tracking of amendments for Floodplain Management Plans via the Hub.	DCCEEW Water will complete the recommended updates to internal and public facing documentation in relation to plan amendments to include reference to floodplain management plans. Additionally, work to enable the tracking of floodplain management plan amendments via the Water Management Plan Hub will be undertaken in the 25/26 financial year. The department accepts this recommendation.

	documentation and tracking of amendments that have occurred since Plan commencement will be updated post May 2025.			
4.2	There have been two amendments to the Border Rivers Plan and one amendment to the Macquarie Plan since Plan commencement. DCCEEW-Water provided evidence of the amendments register and internal guidance documents that was used to support these amendments. However, DCCEEW-Water advised that it intends to adopt the Hub going forward as the system used to identify, prioritise and track amendments. The Commission is supportive of the Hub as the tool for implementation of amendment Plan provisions	4.2	See R 4.1	As above