

16 August 2023

Professor Hugh Durrant-Whyte
 Commissioner
 Natural Resources Commission
 Level 6, Martin Place
 Sydney NSW 2000

Dear Professor Durrant-Whyte

Audit of the implementation of the Lachlan, Murrumbidgee and Murray regulated water sharing plans

Thank you for your letter dated 24 May 2023 and the enclosed final report for assessing implementation of the Lachlan, Murrumbidgee and Murray water sharing plans (WSPs) as required by Section 44 of the *Water Management Act 2000* (Act).

As requested, we have reviewed the report and provide the responses set out below:

WaterNSW notes that the audit concluded overall that on balance the provisions of the Plan have not been given full effect in accordance with the Act. We note that 6 recommendations are assigned to WaterNSW as the lead agency. We also note that the majority of the recommendations are assigned to DPE-Water as the lead agency. WaterNSW commits to working with DPE-Water in the implementation of those recommendations. We also note that the WSP was amended in December 2022 and the clause references in the audit are for the WSP prior to that amendment.

Table 1 WaterNSW Response to Audit findings and Recommendations

Findings	Recommendations	Applicable Plan
<p>F2.1 Environmental flow targets were not always met in full during the audit period for:</p> <ul style="list-style-type: none"> ▪ Blowering Dam transparent flows in the Murrumbidgee (Clause 31) ▪ Burrinjuck transparent flows in the Murrumbidgee (Clause 32) ▪ Burrinjuck translucent flows in the Murrumbidgee (Clause 32) 	<p>R 2.1 WaterNSW to implement operational procedures to release transparent and translucent flows for the volumes required under Clauses 31 and 32 of the Murrumbidgee plan. Procedures should include a management action to keep an account of and subsequently release any volume under-target in cases where the full volume was not released in accordance with the target.</p>	<p>Murrumbidgee</p>

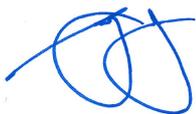
Findings	Recommendations	Applicable Plan
<p>WaterNSW Comment:</p> <p><u>Burrinjuck Dam:</u></p> <p>Condition 9 of WaterNSW's Murrumbidgee Water Supply Work Approval requires WaterNSW to ensure that "if some or all of the [transparent/translucent release volume] cannot be released in the succeeding twenty four (24) hours due to system operation constraints, then the shortfall must be added to the minimum release requirement (up to the limit of system operational constraints) for the succeeding day(s) until released."</p> <p>In accordance with that Condition, WaterNSW has an established procedure to release transparent and translucent flows for the volumes required for Burrinjuck Dam under Clauses 31 and 32 of the Murrumbidgee Plan and to keep an account of the releases made. The procedure is embedded in the daily river operations Decision Support System (CARMLite DSS). The procedure was amended in 2013 to include a management action to subsequently release any volume under-target in cases where the full volume was not released in accordance with the target. The continuous record of the cumulative balances is reported as part of the annual compliance reporting. WaterNSW will improve the supporting documentation for these procedures to ensure they are appropriately described. Action to be complete by October 2024.</p> <p><u>Blowering Dam:</u></p> <p>WaterNSW will develop the process, systems and documentation for a similar procedure for Blowering Dam transparent flows and include it in the CARMLite DSS. We will also undertake appropriate training for our staff to ensure the procedure is implemented. Action to be complete by June 2024.</p> <p>WaterNSW will discuss with DPE-Water and the NSW Environmental Water Manager whether it is more appropriate to include a condition on our Murrumbidgee Water Supply Works Approval for Blowering Dam, that is similar to Condition 9 for Burrinjuck Dam, or for the NSW Environmental Water Manager to develop an appropriate Plan for managing environmental flow releases and submit it for the Minister's approval, in accordance with Clause 61 of the WSP (as it was amended in December 2022).</p>		
<p>F2.5 The Commission sighted data during the audit that may indicate that a much greater volume of water has been taken than was ordered in the Murray. WaterNSW indicated that water accounts are reconciled quarterly and some licence holders have different ordering processes and that some of these orders may not be included in the online Water Accounting System (iWAS) figures. Further investigation of the data is required to determine the cause of the variation. If significantly more water has been taken than ordered, then this may present a risk to the implementation of plan clauses to protect environmental water for environmental purposes in the Murray (Clauses 27(7) and (8), Clause 28(2), and Clause 29(3) and (4)).</p>	<p>R2.5.1 WaterNSW to analyse its ordering data and processes to determine the reasons for the variation observed in the Murray between orders and take.</p> <p>R2.5.2 WaterNSW to work with NRAR and DPE-Water to address any issues identified by the data analysis conducted under R2.5.1.</p>	<p>Murray</p>
<p>WaterNSW Comment:</p> <p>WaterNSW is conducting a review of this issue and the preliminary indications are that the primary reason for the variation observed between the orders in the WAS and the water taken is because some large customers in the Murray have their orders managed outside of the primary online WAS (due to size and complexity of orders) and therefore on occasion there are delays in updating the WAS to reflect the actual volumes of water ordered and taken. We will finalise this review and develop an associated Action Plan by end June 2024.</p>		

Findings	Recommendations	Applicable Plan
<p>Channel capacity constraints have not always been met in the Murrumbidgee and Murray during the audit period:</p> <p>F2.9.1 operation of the Hydro Electric Power Scheme in the Murrumbidgee in 2016 caused a channel capacity exceedance at Oddy's Bridge for three consecutive days.</p> <p>F2.9.2 a total of 66 days of exceedances occurred in the Murray across the audit period due to regulated releases to meet user demand; at Edward River Offtake in 2016- 2017 and 2017-2018, and at Gulpa Creek Offtake in 2017-2018.</p>	<p>Nil. No recommendation, addressed during the audit period.</p> <p>R2.9.2 WaterNSW to review the reasons for channel capacity exceedances at Edward River Offtake and Gulpa Creek Offtake and put in place measures to promote compliance with the channel capacity constraints of Clause 33 of the Murray plan.</p>	<p>Murrumbidgee, Murray</p>
<p>WaterNSW Comment:</p> <p><i>WaterNSW will action a review of the events in the Murray system to better understand the reasoning for the channel capacity exceedance. Action to be complete by end September 2023.</i></p> <p><i>Notwithstanding the above, some exceedances can occur for short periods of time due to automated infrastructure adjustments and when transitioning between normal regulated flow and uncontrolled (natural) flow periods due to weather conditions. These are operationally difficult to prevent.</i></p> <p><i>For the exceedances that are operationally manageable, WaterNSW will examine options for adjustments to infrastructure settings to minimise the exceedances and provide training to Water Planning and Delivery operators on channel capacity rules within the regulated system and ensure they are aware of and operate the system in accordance with the requirements of the Water Sharing Plans. Action to be complete by June 2024.</i></p>		
<p>F2.11 There are no rules in place to guide rates of change for releases from water storages for the Lachlan and Murrumbidgee plans (Clauses 35 and 46 respectively).</p>	<p>R2.11.1 DPE-Water to establish procedures in relation to the rates of change for releases from water storages for the Lachlan and Murrumbidgee. Procedures should consider environmental considerations, damage to river banks and public safety.</p> <p>R2.11.2 Upon completion of R2.11.1, WaterNSW to develop an operating protocol for rates of change to storage releases to give effect to Clause 35 of the Lachlan plan and Clause 46 of the Murrumbidgee plan.</p>	<p>Lachlan, Murrumbidgee</p>
<p>WaterNSW Comment:</p> <p><i>WaterNSW should be involved/consulted in the development of these procedures to ensure they are fit for purpose and implementable, with consideration to infrastructure constraints.</i></p> <p><i>Upon the completion of DPE – Water development of procedures, WaterNSW will build these into appropriate operating protocols.</i></p> <p><i>Operating protocols as used in systems such as the Lower Darling can be utilised to support the development of rate of change functions.</i></p>		

Findings	Recommendations	Applicable Plan
<p><i>Procedures and operating protocols should give consideration to 3rd party inputs such as water managed for hydro power generation and / or for dam releases to mimic natural inflows. Action to be complete following DPE-Water development of rate of change procedures.</i></p>		
<p>F6.1 Flow spreadsheets for supplementary events in the Murrumbidgee do not clearly assess water available for supplementary take accounting for all the requirements under Clause 69(4-5) of the plan.</p>	<p>R6.1 WaterNSW to develop an explicit assessment template for supplementary water that demonstrates compliance with all relevant provisions of the Murrumbidgee plan (Clause 69(4-5)).</p>	<p>Murrumbidgee</p>
<p>WaterNSW Comment:</p> <p><i>WaterNSW has developed a supplementary assessment template for Murrumbidgee Regulated River Water Source in consultation with DPE and this has been in use since May 2022.</i></p> <p><i>The template will be included in the Standard Operating Procedure for Supplementary Water assessments and announcements, which is under review. Action to be complete by end December 2023.</i></p> <p><i>WaterNSW will continue to improve the template and ensure it can be used to demonstrate compliance with the WSP. WaterNSW is also working with DPE-Water to automate the reporting process to DPE-Water. We will develop a plan which considers the automation of this process by June 2024.</i></p>		

If you have any questions or comments on the above, please contact our Manager Regulatory Strategy Rob O'Neill (E: rob.oneill@watnsw.com.au M: 0423 896 587).

Yours sincerely,



Andrew George
Chief Executive Officer