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Your ref: D22/1998

Professor Hugh Durrant-Whyte  
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### **Audit of implementation of three northern inland regulated river water sharing plans**

Dear Professor Durrant-Whyte

I refer to your letter of 25 August 2022 concerning the audit of the implementation of three northern inland regulated river water sharing plans.

I note the report included positive findings in relation to water access licences and water supply work approvals, tools and processes to manage water access licences, dealings, available water determinations and assessment and compliance related to long term extraction limits. It is also notes that there are several areas where further work is required.

The Department of Planning and Environment has considered each of these recommendations and suggested actions, and our response is in the attached tables. Notably, the Department is progressing several areas of work which I believe will contribute to addressing matters identified within the audit. These are:

1. Commissioning work to develop monitoring and evaluation frameworks for water sharing plans which will inform plan assessment and monitoring (Recommendation R1, Suggestion Action 1.1)
2. Progressing work on an implementation program for key water sharing plan themes. Each theme will document the roles, responsibilities, systems, processes and procedures to ensure implementation and to provide information for future reporting/auditing purposes. (Suggested Actions 3.1)
3. Progressing work to validate and monitor the numbers (including losses) underpinning the Available Water Determination calculations and demonstrate that they provide the protections to assure the maintenance of supply as (applicable all plan areas) (Recommendation R4.1).
4. Applying relevant conditions to WaterNSW work approvals to support implementation of plan provisions (Recommendation R7.2.1).

The outcomes of this work, along with the Commission's audit, will inform the next steps in relation to these management plans. If you require additional information or wish to discuss these matters further, please contact Peter Hyde, Director Inland Planning, in the Department, at [peter.hyde@dpie.nsw.gov.au](mailto:peter.hyde@dpie.nsw.gov.au).

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

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Jim Bentley". The signature is fluid and cursive, with the first name "Jim" and last name "Bentley" clearly distinguishable.

Jim Bentley

Chief Executive Officer, NSW Water Sector

Attachment A – Tables

**Table 1: Audit findings and recommendations relevant to DPE Water**

- *Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2016*
- *Water Sharing Plan for the Gwydir Regulated River Water Sources 2016*
- *Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Sources 2016*

Findings	Recommendations	DPE Water comment
F1.1 Provisions related to vision, objectives, strategies, and performance indicators under Part 2 of the Plan were not implemented in the audit period	R1.1 DPE-Water to lead the monitoring and evaluation of 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 (applicable all plan areas)	Agree - NSW has developed a robust and defensible evaluation framework and program to inform WSP performance assessment and monitoring plans that include what monitoring is required, where, when, how often and who is responsible for doing and reporting it. The development of the framework was completed in December 2021. Implementation of the Evaluation program will commence in 2022.
F2.2 Volumes of water were not maintained in the combined storages for the period December 2018 to February 2020 to facilitate the delivery of replenishment flows under clause 59(2) in the Namoi plan.	R2.2 DPE-Water (with the support of WaterNSW) maintain adequate reserves in the combined storages in the Namoi, to cover replenishment flows consistent with the requirements of Clause 59(2) (applicable Namoi plan area)	Agree - The Department has already progressed action against this recommendation. Regular checks will be carried out as part of the monthly resource assessments to ensure that adequate reserves are maintained.
F2.3 Rules regarding rates of change in releases from storages have not been established to take into account environmental considerations, damage to	R2.3.1 DPE-Water to establish procedures in relation to the rates of change for storage releases for the Namoi, Gwydir and Macquarie.	Agree - Although it is noted that WaterNSW do operate to rates of rise and fall. These require more

<p>river banks and public safety under Clause 61 of the Namoi plan and Clause 60 of the Gwydir plan and Macquarie plans.</p>	<p>Procedures should consider environmental considerations, damage to river banks and public safety. DPE-Water may consult with relevant stakeholders including WaterNSW and DPE-EHG (applicable all plan areas)</p>	<p>transparency, and DPE Water will work with WaterNSW on this over next 18 months.</p>
	<p>R2.3.2 Upon completion of R2.3.1, WaterNSW (for Macquarie) and DPE-Water (for Namoi and Gwydir) to formally document rules for rates of change for storage releases, addressing environmental considerations, damage to river banks and public safety in accordance with the Minister's procedures. (applicable all plan areas)</p> <p>R7.2.1, 7.2.2 and 7.2.3 apply.</p>	<p>Agree. Upon completion of R2.4.1 by WNSW, DPE Water to formally endorse the procedure. To be completed by December 2023.</p>
<p>F2.5 A bulk water transfer from Windamere to Burrendong Dam took place in 2019 but not in time (or sufficient volume) to address insufficient supply to downstream needs in the Macquarie River during the audit period as described under Clause 61 of the Macquarie plan.</p>	<p>R2.5 DPE-Water to develop clear thresholds and triggers for when bulk water transfer planning and implementation should occur. These should be formally documented and published. (Macquarie plan area only)</p>	<p>Agree. Further work is required to document when bulk water transfers are considered. Water NSW provides monthly forecasts for next 10-21 months. The threshold in Windemere volume above 70 GL to be transferred to Burrendong when forecast shows the need. The 70 GL threshold has been published in the Macquarie Water Allocation Guide on the Departments website.</p> <p>A December 19 transfer would have augmented 9Burrendong only by 15 GL after transfer losses with no material improvement. This transfer loss would have been irresponsible at the height of the drought.</p>

<p>F2.6 Planned environmental water provisions in the Namoi plan under Clause 14 were not always met during the audit period:</p> <ul style="list-style-type: none"> <li>• The minimum daily flow was not met at Walgett (gauge 419091) for 32 days in June to August 2017 when the combined dam storage should have enabled this flow to be delivered.</li> <li>• Gauge 419091 has not recorded flow data since 15 July 2020 which does not allow tracking of planned environmental water or monitoring of compliance.</li> </ul>	<p>R2.6.2 DPE-Water to determine an appropriate measurement mechanism for end of system flow to replace the 419091 gauge that is no longer functioning. (Namoi plan area only) R7.2.1, 7.2.2 and 7.2.3 apply.</p>	<p>Agree. Minimum flow release as measured at Walgett (419091) site is being replaced with the total flow in the Namoi River at Goangra (419026) and Pian Creek at Waminda (419049). The new minimum flow is equivalent to previous flow at Walgett. This update will be included in WSP amendments commenced post the accreditation of the Namoi SW WRP.</p>
<p>F2.7 The distributions of the Macquarie environmental water sub-allowances have been two fifths to sub-allowance 1 (translucent) and three-fifths to sub-allowance 2 (active) throughout the audit period, which is not in accordance with Clause 14(12)(c).</p>	<p>R2.7 DPE-Water to assess the most appropriate distribution of the Macquarie environmental sub-allowances and take appropriate action to address the gap between operations and plan requirements. This could include changing operations to align with the plan, publishing an order or changing the requirement in the plan to align with agreed operational protocols.</p>	<p>Disagree. The plan was amended in July 2022 and will address this issue. The amendments recognise that the decisions specified in CI 14 (13) are annual planning decisions which are the responsibility of the Environmental Water Manager. It is more appropriate for this to occur at the beginning of the water year informed by the annual environmental watering plan developed by DEH. The relevant provision has been re-drafted to remove the reference to S.45 (1)(b) of the WMA, which required a formal amendment to the plan. Therefore, an Order is no longer required.</p>
<p>F3.1 In relation to Part 8 Division 1 and planned environmental provisions of Part 3- Provisions related to limits to availability of water, specifically LTEL:</p>	<p>R3.1 DPE-Water to manage LTEL and assess LTEL compliance for these Regulated River plans in accordance with Part 8 Division 1 (as relevant) of each plan to prevent LTEL exceedance. (applicable all plan areas)</p>	<p>Agree. DPE will assess LTAEEL compliance annually and publish assessments on the website. Compliance action will be undertaken when required to bring extractions within limits. This will be undertaken annually.</p>

<ul style="list-style-type: none"> <li>• Compliance assessments were not implemented within the audit period every year in accordance with the plans, except for Gwydir and Macquarie WSPs in 2020-21 water year when the first compliance assessment was undertaken.</li> <li>• LTEL was exceeded in the Gwydir plan for at least one water year (2020-21) by 11.5 percent which is not in accordance with Clause 31 and Clause 13(a).</li> </ul>		
<p>F4.1 There is insufficient evidence to demonstrate that the maintenance of water supply for domestic and stock, high security and local water utilities WALs set out in clauses 34(1), 35(1) and 36(1) in the Namoi, Gwydir and Macquarie plans can be met through the worst period of low inflows to this water source.</p>	<p>R4.1 DPE-Water to review the evidence base for the numbers (including losses) underpinning the AWD calculations and demonstrate that they provide the protections to assure the maintenance of supply as (applicable all plan areas)</p>	<p>Agreed - the Department has completed action in relation to the recommendation.</p> <p>The Department has reviewed its spreadsheets used to manage extraction to ensure there is clarity around how high priority water is drawn down compared to general security.</p> <p>Data has been hydrologically validated and reported in "Water Allocation Methodology Guide" already uploaded in the DPE web.</p>
<p>F6.1 Evidence does not demonstrate that prioritisation and principles established in sections 5(3) and 58 of the Act that apply to the management of access licences were implemented in the Namoi and Gwydir plans. Specifically, documentary evidence shows that water from the higher priority requirements budget was borrowed for the delivery of regulated river (general security) water between January and December 2018 in the Namoi plan and January 2019 and</p>	<p>DPE-Water to cease the practice of borrowing from the higher priority requirements budget within the resource assessment process for the purpose of delivery of regulated river (general security) water and adhere to principles and prioritisation set out in sections 5(3) and 58 of the Act.</p>	<p>Agree. The movements in the resource distribution line items should conform 5(3) and 58 of the Act. This will be adhered to in the future for transparency and compliance.</p> <p>Of relevance to note that this would not have achieved a different decision or outcome in Namoi, Gwydir or Macquarie - all receiving less than budgeted inflow allowed by the plan. This action has already been implemented.</p>

<p>February 2020 in the Gwydir plan, despite there being no water to cover losses associated with delivery to regulated river (general security) access licences. The Commission had insufficient evidence to make a finding in the Macquarie plan.</p>		
<p>F6.2 Supplementary water assessments were not sufficiently detailed to demonstrate that all applicable requirements were considered under clause 48 of the Namoi plan and clause 47 of the Gwydir plan. For example assessments against the requirements of the North West Unregulated Flow Management Plan for the Namoi or Gwydir were not explicitly documented during the audit period to inform assessment of available supplementary water.</p>	<p>Nil. This finding was resolved following the audit period.</p>	<p>No action is required</p>
<p>F7.2 WaterNSW has not been notified of all relevant mandatory conditions under its Statement of Approvals (90WA811444 Namoi plan, 90WA811596 in the Gwydir plan, 80WA704431 in the Macquarie) to reflect all relevant requirements set out in clauses 57(3), 56(3), 56(3) respectively to give effect to Parts 3, and 12 of the plans as relevant</p>	<p>R7.2.1 DPE- Water to prepare relevant conditions for WaterNSW Statement of Approvals (90WA811444 Namoi plan, 90WA811596 in the Gwydir plan, 80WA704431 in the Macquarie plan) in accordance with relevant plan provisions to give effect to all relevant requirements of Parts 3, 12 of the plans as required under sections 102(4), 102(5) and 100(1A) of the Act. This should include the specification of gauge numbers where appropriate.</p>	<p>Agree. Complete</p>

	<p>R7.2.2 DPE-Water to place relevant conditions on the WaterNSW Statement of Approvals (90WA811444 Namoi plan, 90WA811596 in the Gwydir plan, 80WA704431 in the Macquarie plan) to give effect to all relevant requirements of Parts 3, 12 of the plans as required under sections 102(4), 102(5) and 100(1A) of the Act. (applicable all plan areas)</p>	<p>Agree. DPE-Water has been working with the relevant licensing team to resolve conditioning issues. This work has been delayed by the WaterNSW WAVE project and migration of mandatory condition work to the new system. We plan to have this work complete by 30 June 2022 although the transition to the new system could cause further delays.</p>
	<p>R7.2.3 Upon completion of R7.2.1 and R 7.2.2, DPE Water to notify WaterNSW of its updated Statement of Approvals conditions (90WA811444 Namoi plan, 90WA811596 in the Gwydir plan, 80WA704431 in the Macquarie plan) that reflect relevant plan requirements, as required under sections 102(4), 102(5) and 100(1A) of the Act.</p>	<p>Agree. This also depends on completion of response to SA7.1 in relation to works specifications.</p>
<p>F9.1 Mandatory conditions on WALs were missing to give effect to:</p> <ul style="list-style-type: none"> <li>• Clause 56(2)(d) in the Namoi plan, Clause 55(2)(d) in the Gwydir and Macquarie plans, which relate to WAL holder entitlements,</li> <li>• Clause 56(6)(b) in the Namoi plan, Clause 55(5) in the Gwydir plan to give effect to Clause 32 in the plans, which relates to the volume limits that may be taken or assigned from Regulated River (General Security) WALs.</li> </ul>	<p>R9.1.1 DPE-Water to prepare relevant conditions for WALs to ensure all relevant mandatory conditions to the plans are adequately addressed. This includes:</p> <ul style="list-style-type: none"> <li>• Clause 56(2)(d) in the Namoi plan, Clause 55(2)(d) in the Gwydir and Macquarie plans, which relate to WAL holder entitlements,</li> <li>• Clause 56(6)(b) in the Namoi plan, Clause 55(5) in the Gwydir plan to give effect to Clause 32 in the plans, which relates to the volume limits that may be taken or</li> </ul>	<p>Disagree. A decision was made that mandatory conditions were not required to give effect to these Plan rules because WaterNSW regulates accounting for licence holders. Information about accounting rules, such as those relating to carry-over, is provided by WaterNSW.</p>



	assigned from Regulated River (General Security) WALs.	
	R9.1.2 DPE-Water to place relevant mandatory conditions (as set out in R9.1.1) on the WALs in the licencing and approval system.	See response for R9.1.1 above.

**Table 2: Observations and suggested actions relevant to DPE Water**

- *Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2016*
- *Water Sharing Plan for the Gwydir Regulated River Water Sources 2016*
- *Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Sources 2016*

Observations	Actions	DPE Water comment
O1.1 There is no transparent reporting of Plan performance in relation to progress towards achieving stated objectives.	SA1.1 DPE-Water to publicly report on progress towards objectives of the Plan.	Agree - NSW is developing an implementation and reporting program for key WSP themes. This includes developing annual reporting products to track progress of WSP Monitoring and Evaluation. The first annual S51 report will be completed for the 22/23 period and published thereafter. NSW is also developing a robust and defensible evaluation framework to inform WSP performance assessment and monitoring plans. The two projects combined will allow us to maximise the results from monitoring activities, and transparently share the results with stakeholders
O2.2 Channel capacity constraints in the Macquarie have not been determined and specified as required under Clause 59.	SA2.2 DPE - Water to determine and specify channel constraints in the Macquarie-Cudgegong Regulated water Sources on the WaterNSW Statement of Approval	Agree. The Department will progress work with Water NSW to address this action through confirmation of channel capacity constraints and application to the WaterNSW Statement of Approval by 1 July 2023.
O2.3 It is not transparent when periodic grouping of orders under Clause 63 in the Namoi and Clause 61 in the Gwydir is required and when it has occurred. 'Block releases' have occurred and been conducted in accordance with Clause 63 in	SA2.2 DPE-Water to document and publish clear thresholds under which grouping of orders would be triggered, including defining block releases and whether these are considered 'grouping of	Agree. Department with Water NSW is preparing documents to better guide instances when grouping of orders will be required. Due by December 2022.

<p>the Namoi and Clause 61 in the Gwydir, without triggering reporting and compliance activities associated with this clause for the Gwydir.</p>	<p>orders' under the Namoi and Gwydir plans.</p>	
<p>O3.1 Systems and processes, including quality assurance for the LTEL assessment and compliance work are not documented.</p>	<p>SA3.1 DPE-Water to establish, document and publish a methodology for LTEL assessment and compliance. This methodology and associated model should be reviewed by an independent expert hydrologist. The documented methodology should include adequate information in relation to the models and assumptions underpinning these assessments.</p>	<p>Agree - NSW is developing an implementation and reporting programs for key WSP themes. Each theme will document the roles, responsibilities, systems, processes and procedures relevant for implementation. Work on priority implementation themes including managing to extraction limits (LTAAEL assessment and compliance) was completed in December 2021. Publication of this work is anticipated in the 22/23 period as part of the completed overall Programs.</p>
<p>O6.1 Proactive triggers do not exist to support timely objective risk-based decision making to avoid borrowing from higher priority users.</p>	<p>SA6.1 DPE-Water to set up proactive triggers to restrict take when required so that higher priority requirements are prioritised above other water users in accordance with the principles and priorities set out in sections 5(3) and 58 of the Act.</p>	<p>Disagree. Proactive triggers are not required as this will be self-correct once resource distribution line items follow the priorities of the Act.</p>
<p>O6.2 The higher priority requirements budget does not compartmentalise water sufficiently to allow for the prioritisation outlined in sections 5(3) and 58 of the Act.</p>	<p>SA6.2 DPE-Water to document and implement how prioritisation within the higher priority requirements budget should occur within the water allocation process so that the relative priority of environmental, basic landholder rights, native title rights and regulated river (high security) requirements clearly aligns to</p>	<p>Agree. This is only relevant in droughts when minimum budgeted inflow not materialised, which only happened once since WMA 2000 enacted. In normal years all higher priorities are guaranteed 100% allocation without differentiating among them.</p>

	requirements of sections 5(3) and 58 of the Act.	This may form part of drought contingency documentation proposed for July 2023.
O6.3 The higher priority requirements budget for the Gwydir plan has been reduced from the volume held until June 2021 according to the methodology.	SA6.1 applies	
O6.4 DPIE-Water has changed the information published in water allocation statements during the audit period that makes it difficult for water users to track water availability over time. There were instances where information available internally to DPIE-Water was not made public via water allocation statements impacting on transparency of system management.	SA6.4 DPE-Water to implement a consistent and transparent approach to information made publicly available via water allocation statements to allow water users and stakeholders to easily track water use and water availability over time.	Agree. The Department has already implemented this action and published water allocation guide and statement details that can be mapped to the guide.
O7.1 Capacity of works or its location (latitude and longitude) is not consistently stated in the Statement of Approval for supply work approvals	SA7.1 WaterNSW and DPE- Water to include capacity and detailed location (latitude, longitude) information on all supply work Statement of Approvals for transparency and to support enforcement activities (both new and existing).	Agree. WaterNSW (Rural) is in process of reviewing existing specifications and editing/adding to the list for each of the approvals where specifications are incorrect/incomplete.  Once WaterNSW has provided this information, the specifications will be entered in the Water Licensing System by DPE Water with assistance from

		WaterNSW. Estimated date of completion depends on timing of the provision of information from WaterNSW.
<p>O9.2 Clause 56(2)(e) in the Namoi plan, Clause 55(2)(e) Gwydir and Macquarie plans, which requires the taking of water not to exceed the remaining water allocations did not appear as mandatory conditions on WALs. However, the Commission identified that this would be enforced for the plans via Section 60C of the Act</p>	<p>SA9.2 DPE Water to consider a strategic approach for applying mandatory conditions which are already included in a higher instrument such as the Act and Regulation. Conditions could include a rewrite of provisions of higher instruments, reference specific high instruments or they should be omitted. This approach should be uniformly adopted and accompanied with an education campaign to inform WAL and approval holders what to expect.</p>	<p>Agree. The Department plans to complete this action by July 2023.</p>