

Final Report
Audit of the implementation of
coastal unregulated and alluvial water
sharing plans

June 2021

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Acknowledgement of Country

The Natural Resources Commission acknowledges and pays respect to traditional owners and Aboriginal peoples. The Commission recognises and acknowledges that traditional owners have a deep cultural, social, environmental, spiritual and economic connection to their lands and waters. We value and respect their knowledge in natural resource management and the contributions of many generations, including Elders, to this understanding and connection.

In relation to the areas subject to this audit, the Commission pays its respects to the Traditional Owners past, present and future, Local Aboriginal Land Councils as well as other Aboriginal peoples for whom these waterways are significant.

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Document No: D21/0731

ISBN: 978 1 925204 65 0

Acronyms and abbreviations

Act	<i>Water Management Act 2000 No 92 (NSW)</i>
AWD	Available Water Determination
ASAE	Australian Standard on Assurance Engagements
Commission	the Natural Resources Commission
CIRaM	Compliance Investigation Reporting and Management system
DPIE-Water	Department of Planning, Industry and Environment – Water
DPI-Water	(former) Department of Primary Industries – Water
F	Finding
IPART	Independent Pricing and Regulatory Tribunal
iWAS	Internet Water Accounting System
LTAael	Long-term average annual extraction limit
NRAR	Natural Resources Access Regulator
O	Observation
Plan	Water sharing plan
‘The plans’	The plans reviewed in this report (see Section 2.2 for list)
R	Recommendation
SA	Suggested action
Regulation	<i>Water Management (General) Regulation 2018 (NSW)</i>
WAL	Water access licence
WAS	Water Accounting System
WLS	Water Licensing System

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1 Executive summary

The Natural Resources Commission (the Commission) has audited eight coastal unregulated and alluvial water sharing plans in the north and south coasts of NSW¹ (referred to in this report as ‘the plans’) to ascertain whether the provisions of the plans are being given effect to, as required under Section 44 of the *Water Management Act 2000 No 92* (the Act).²

1.1 Audit conclusion

While many of the provisions of the plans are being implemented, the Commission considers that on balance the provisions of the plans have not been given full effect in accordance with the Act.

The audit conclusion is based on the procedures performed and the evidence obtained. The Commission is of the view that the information presented fairly reflects the implementation of the plans.

1.2 Audit findings and recommendations

The Commission found that across most criteria, the relevant organisations generally have systems, processes and procedures in place that align with legislative requirements and support implementation of the plans.

The audit focussed on current implementation practices to determine recommendations but for transparency also considered evidence from the full audit period, which is defined as being from plan commencement under the Act (between July-September 2016) to the date of receipt of agency comments on the draft report (June 2021).

The Commission also found the following key aspects of the plans were being implemented:

- water access licences and supply work approvals were generally assessed and processed in accordance with legislative requirements
- water access licence management tools are in place to manage water access licences
- dealings are being undertaken in accordance with legislative requirements
- mandatory conditions are generally translated accurately to conditions for water access licences and approvals
- available water determinations (AWDs) were made and generally applied to licences in accordance with legislative requirements (with some exceptions in the first year).

¹ The plans reviewed in this report include the: *Water Sharing Plan for the Brunswick Unregulated and Alluvial Water Sources 2016*; *Water Sharing Plan for the Clarence River Unregulated and Alluvial Water Sources 2016*; *Water Sharing Plan for the Clyde River Unregulated and Alluvial Water Sources 2016*; *Water Sharing Plan for the Deua River Unregulated and Alluvial Water Sources 2016*; *Water Sharing Plan for the Macleay Unregulated and Alluvial Water Sources 2016*; *Water Sharing Plan for the Snowy Genoa Unregulated and Alluvial Water Sources 2016*; *Water Sharing Plan for the Tuross River Unregulated and Alluvial Water Sources 2016*; *Water Sharing Plan for the Nambucca Unregulated and Alluvial Water Sources 2016*.

² Note that in this report, ‘the Act’ is used to refer only to the *Water Management Act 2000* and ‘the Regulations’ refers only to the *Water Management (General) Regulations 2018*.

Gaps to implementation were also found. These are summarised in **Table 1**, which outlines the audit findings and recommendations against the ten audit criteria:

- **Criterion 1:** The relevant responsible parties have implemented plan provisions relating to vision, objectives, strategies and performance indicators
- **Criterion 2:** The relevant responsible parties have implemented the system operation rules as set out in the Plan
- **Criterion 3:** The relevant responsible parties have implemented plan provisions relating to limits to the availability of water, specifically long-term average annual extraction limits
- **Criterion 4:** The relevant responsible parties have implemented plan provisions relating to limits to the availability of water, specifically available water determinations
- **Criterion 5:** The relevant responsible parties have implemented plan provisions relating to granting access licences
- **Criterion 6:** The relevant responsible parties have implemented plan provisions relating to managing access licences
- **Criterion 7:** The relevant responsible parties have implemented plan provisions relating to rules for water supply work approvals
- **Criterion 8:** The relevant responsible parties have implemented plan provisions relating to access licence dealing rules
- **Criterion 9:** The relevant responsible parties have implemented plan provisions relating to mandatory conditions
- **Criterion 10:** The relevant responsible parties have implemented plan provisions relating to amendments (where these are not optional) and there is evidence that identified amendments (which may include optional amendments) have been given due consideration.

The Commission has raised recommendations (R) only for material findings (F) relating to gaps in the implementation of legislative requirements that result in the plan not being given full effect under Section 44 of the Act. The Commission focussed on the fundamental elements of plan implementation. The Commission did not explore the quality of implementation in detail in this audit.

The Commission undertook detailed limited assurance sample testing at the plan level and examined roles and responsibilities, systems, processes, and procedures as relevant for all criteria. This information was examined against detailed legislative requirements as set out for each criterion. For balance, this report notes where implementation complies with legislative requirements and provides more information where gaps have been identified. In the interests of brevity, the tables of findings and observations do not list all positive findings, only identified gaps to enable future action to be taken to address them.

The Commission did not prioritise legislative provisions or recommendations in relation to gaps in implementing these provisions. The Commission has not assigned specific time frames to recommendations. However, given the findings are gaps to legislative requirements, the Commission considers that all recommendations should be implemented as soon as practicable within a maximum timeframe of 12 months.

The Commission has also raised observations (O) and suggested actions (SA) related to areas that are not specifically legislative requirements but support the implementation of these requirements.

While this report discusses specific consequences for each criterion, the overarching consequence of not giving full effect to water sharing plan provisions is that the objectives of the plans are unlikely to be achieved. These objectives are intended to support environmental, social and economic outcomes inclusive of protecting groundwater dependent ecosystems or groundwater dependant cultural significant sites. In addition, the principles set out in Section 5 of the Act are not likely being given full effect.³

³ Principles set out in Section 5 of the Act include the protection of environmental and cultural assets, minimisation of cumulative impacts on water sources and dependent ecosystems, maximising social and economic benefits, adopting an adaptive management approach, sharing water in a way that protects water sources and their dependent ecosystems as well as basic landholder rights.

Table 1: Audit findings and recommendations

Findings	Recommendations
Finding Criterion 1: The relevant responsible parties have not implemented plan provisions relating to vision, objectives, strategies and performance indicators	
F1 Provisions in Part 2 of the plans related to vision, objectives, strategies, and performance indicators were not implemented within the audit period for any of these coastal unregulated and alluvial plans.	<p>R1 DPIE-Water to implement provisions in Part 2 of the plans, specifically to:</p> <ul style="list-style-type: none"> ▪ lead the monitoring and evaluation of performance indicators to measure the success of the strategies to reach the objectives of the coastal unregulated and alluvial plans ▪ use generated data to support decision making for coastal unregulated and alluvial plan implementation.
Finding Criterion 2: The relevant responsible parties have implemented the system operation rules as set out in the plans except for the Macleay Plan where systems operation rules were partially met.	
F 2 The Malpas Dam release requirements set out in Clause 28 of the Macleay Plan were not met on numerous occasions between 1 July 2016 and 25 March 2021.	<p>R 2.1 NRAR to monitor and manage performance to ensure requirements in Clause 28 in the Macleay Plan are met.</p> <p>R2.2 DPIE- Water to ensure that the two river gauging stations at Gara River - Willow Glen gauge (206035) and downstream Malpas Dam gauge (206039) - are appropriate to measure low flows and to be used as flow reference points to enable real time management of environmental releases. If these gauges or their controls are deemed unsuitable, consider other options to enable appropriate and measurable environmental releases are made to achieve objectives.</p> <p>R2.3 WaterNSW to share rating change information with Armidale Council for the two river gauging stations at Gara River - Willow Glen gauge (206035) and downstream Malpas Dam gauge (206039) - to ensure the automatic release valve programming is reflective of Willow Glen (206039) gauge flows.</p>
Finding Criterion 3: The relevant Government agencies have not implemented plan provisions relating to limits to the availability of water, specifically long-term average annual extraction limits.	
F 3 Provisions related to limits to availability of water, specifically LTAAEL, were not implemented within the audit period in accordance with Part 6 or 7 Division 1 for any of these coastal unregulated and alluvial plans.	R 3 DPIE-Water to manage Long Term Average Annual Extraction Limits (LTAAEL) and assess LTAAEL compliance for these coastal unregulated and alluvial plans in accordance with Part 6 or 7 Division 1 (as relevant) of each coastal unregulated and alluvial plan.
Finding Criterion 4: The relevant responsible parties have partially implemented plan provisions relating to limits to the availability of water, specifically available water determinations.	
F 4.1 Long Term Average Annual Extraction Limit compliance assessment was not undertaken (see F3). This LTAAEL compliance assessment was therefore not considered in making Available Water Determinations for access licences as required by Division 2 of Part 6 or Part 7 (as relevant) of each plan.	R 4.1 DPIE-Water to implement R 3 and use the Long Term Average Annual Extraction Limit (LTAAEL) compliance assessment to inform Available Water Determinations adjustments as required by Division 2, Part 6 or 7 (as relevant) of each plan.
F 4.2 AWD applied to accounts was less than the AWD orders on numerous occasions in 2016-17 in the Clyde, Nambucca, Macleay and Deua and Snowy Genoa plans.	Nil
Finding Criterion 5: The relevant Government agencies have partially implemented plan provisions relating to granting access licences.	
F 5 In all eight plans water access licence holders did not receive written notice of the mandatory conditions for water access licences converted from former entitlements until February and March 2018 (20-21 months after plan commencement), giving delayed effect to Section 66(1A) of the Act.	Nil
Finding Criterion 6: The relevant Government agencies have partially implemented plan provisions relating to managing access licences.	
F 6 Whilst provisions relevant to each plan are set up in the water accounting system (with the exception of carryover in some water sources), comprehensive extraction data is not available to enable the management of individual accounts to ensure maximum allowable take is not exceeded in accordance with Part 8 or 9 (as relevant) of the WSPs.	<p>R 6.1 WaterNSW to obtain reliable extraction data for individual WALs in these coastal unregulated and alluvial systems and use it to ensure maximum allowable take is not exceeded as set out under Part 8 or 9 (as relevant) of these coastal unregulated and alluvial plans.</p> <p>R 6.2 WaterNSW to complete account configuration for the water sources in these coastal unregulated and alluvial plans.</p>

Findings	Recommendations
Finding Criterion 7: The relevant Government agencies have partially implemented plan provisions relating to rules for water supply work approvals.	
<p>F 7 In all eight plans approval holders did not receive written notice of the mandatory conditions converted from former entitlements or changed approval conditions until February and March 2018 (20-21 months after plan commencement), giving delayed effect to Section 100(1A) of the Act.</p>	Nil
Finding Criterion 8: The relevant Government agencies have implemented plan provisions relating to access licence dealing rules.	
Meets criteria, no findings identified.	Meets criteria, no recommendations identified.
Finding Criterion 9: The relevant Government agencies have partially implemented plan provisions relating to mandatory conditions.	
<p>F 9.1 Mandatory conditions were not consistently applied in accordance with Part 11 (Part 12 in Tuross and Macleay WSPs) in relation to water supply works decommissioning of works, and construction of works in accordance with the Australian Bore Guidelines for the Clarence, Brunswick, Macleay plans.</p> <p>F 9.2 Omissions in the application of mandatory conditions in accordance with Part 11 (Part 12 in Macleay) in relation to water access licences, was found in the Macleay Plan. These concerned water allocation rules in Division 2 (access rules).</p>	<p>R 9.1 DPIE-Water to review water licensing system code and associated application processes in NRAR and WaterNSW to ensure mandatory conditions in approvals and WALs are applied as relevant going forward. This should include setting up a process to communicate clearly with NRAR and WaterNSW those conditions omitted at plan commencement that are applicable to some approvals or WALs that need to be considered and added as mandatory conditions on a case by case basis for each plan.</p>
Finding Criterion 10: The relevant Government agencies have implemented plan provisions relating to amendments (where these are not optional) and there is no evidence that identified amendments (which may include optional amendments) have been given due consideration.	
<p>F 10 Due consideration has not been given to non-mandatory amendments for these coastal unregulated and alluvial plans.</p>	<p>R 10 DPIE-Water to formalise and implement a process for documenting the:</p> <ul style="list-style-type: none">▪ decision making process that underpins how and whether to implement potential amendments▪ status of potential amendments.

Table 2: Audit observations and suggested actions

Observations	Suggested actions to support recommendations
O1 There is no transparency of Coastal Unregulated and Alluvial plan performance in relation to achieving its objectives.	SA1 DPIE-Water to publicly report on progress towards plan objectives.
O3.1 Roles and responsibilities, systems, processes and procedures, including quality assurance for the Long Term Annual Average Extraction Limit (LTAAEL) assessment and compliance work are not documented.	SA3.1 DPIE-Water to document the roles, responsibilities, systems, processes and procedures relevant to Long Term Annual Average Extraction Limit (LTAAEL) management and compliance for the Coastal Unregulated and Alluvial systems.
O3.2 Comprehensive extraction data is not available to inform Long Term Annual Average Extraction Limit (LTAAEL) set out in Part 6 or 7 Division 1 (as relevant) of each plan.	SA3.2 DPIE-Water to obtain reliable extraction data and use it to assess Long Term Annual Average Extraction Limit (LTAAEL) compliance for the Coastal Unregulated and Alluvial plans in accordance with Part 6 or 7 Division 1 (as relevant) of each plan.
O 4.1 Procedures for determining Available Water Determination (AWD) amounts in accordance with requirements set out in the Act and Regulation, including data requirements and methods appropriate for coastal unregulated and alluvial systems, are not available.	SA 4.1 DPIE-Water to document the roles and responsibilities, systems, processes and procedures relevant to determining Available Water Determination (AWD) amounts for coastal unregulated and alluvial systems.
O 4.2 In 2016/17, the Water Register, in some cases depending on the search method used, it is not clear which the Available Water Determination (AWD) was applied to accounts.	SA 4.2 WaterNSW to ensure that Water Register is transparent in terms of how sub-categories are applied to WALS and to enable water sources to be clearly searchable within a water sharing plan to improve transparency of how AWDs were applied to accounts.
O 6 DPIE-Water participates in developing and reviewing the database configuration rules coded into the Water Accounting System, though this process is informal.	SA 6 DPIE-Water to develop a process to ensure its role in the configuration of rules into the Water Accounting System is clear and understood by all parties involved in this process and that the configuration process for WaterNSW is simplified to enable timely configuration of plan rules.
O 8 The NSW Water Register contains dealing related information which is incomplete and uses old terminology.	SA 8 WaterNSW to increase the accuracy and extent of the dealing related information available on the NSW Water Register for improved transparency.
O 10 The Brunswick, Clarence and Nambucca plans have not been amended to acknowledge native title determinations that have occurred in the audit period.	SA 10 DPIE-Water to amend the Brunswick, Clarence and Nambucca plans to reflect current native title determinations.

2 The Commission's role and audit approach

2.1 The Commission's role in auditing management plans

The Commission is an independent body with broad investigating and reporting functions that aim to establish a sound evidence base to inform natural resource management in the social, economic and environmental interests of NSW.

The Commission has a role under Section 44 of the Act to audit water management plans within the first five years of each plan to ascertain whether their provisions are being given effect to. This role began on 1 December 2018 under changes to the Act.

Water management plans include:

- **water sharing plans** – statutory documents that establish the rules for sharing water between the environment and other water users
- **floodplain management plans** – frameworks to coordinate flood work development to minimise future changes to flooding behaviour, and to increase awareness of risk to life and property from flooding.

More detail on the purpose of plans is provided in **Section 3.1**.

2.2 Audit objective

The objective of this audit was to determine, in accordance with Section 44 of the Act, whether the provisions of the following eight water sharing plans are being given effect to:

- *Water Sharing Plan for the Brunswick Unregulated and Alluvial Water Sources 2016* (the Brunswick Plan)
- *Water Sharing Plan for the Clarence River Unregulated and Alluvial Water Sources 2016* (the Clarence Plan)
- *Water Sharing Plan for the Clyde River Unregulated and Alluvial Water Sources 2016* (the Clyde Plan)
- *Water Sharing Plan for the Deua River Unregulated and Alluvial Water Sources 2016* (the Deua Plan)
- *Water Sharing Plan for the Macleay Unregulated and Alluvial Water Sources 2016* (the Macleay Plan)
- *Water Sharing Plan for the Snowy Genoa Unregulated and Alluvial Water Sources 2016* (the Snowy Genoa Plan)
- *Water Sharing Plan for the Tuross River Unregulated and Alluvial Water Sources 2016* (the Tuross Plan)
- *Water Sharing Plan for the Nambucca Unregulated and Alluvial Water Sources 2016* (the Nambucca Plan).

2.3 Audit standards

This audit was executed as a limited assurance engagement in accordance with the following standards:

- *Standards on Assurance Engagements (ASAE) 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information*
- *ASAE 3100 Compliance Engagements*
- *Auditing Standard ASQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, and Other Assurance Engagements.*

In accordance with these standards, the Commission has:

- complied with applicable ethical requirements
- planned and performed procedures to obtain independent assurance about whether the relevant parties have implemented the plans, in all material respects, as evaluated against the audit criteria.

2.4 Audit criteria and focus

Audit criteria were developed based on common parts of the plans that the Commission considered warranted examination to ascertain whether provisions are being given effect to.

The audit criteria were:

- **Criterion 1:** The relevant responsible parties have implemented plan provisions relating to vision, objectives, strategies and performance indicators (see **Chapter 5**)
- **Criterion 2:** The relevant responsible parties have implemented the system operation rules as set out in the Plan (see **Chapter 0**)
- **Criterion 3:** The relevant responsible parties have implemented plan provisions relating to limits to the availability of water, specifically long-term average annual extraction limits (see **Chapter 7**)
- **Criterion 4:** The relevant responsible parties have implemented plan provisions relating to limits to the availability of water, specifically available water determinations (see **Chapter 8**)
- **Criterion 5:** The relevant responsible parties have implemented plan provisions relating to granting access licences (see **Chapter 9**)
- **Criterion 6:** The relevant responsible parties have implemented plan provisions relating to managing access licences (see **Chapter 10**)
- **Criterion 7:** The relevant responsible parties have implemented plan provisions relating to rules for water supply work approvals (see **Chapter 11**)
- **Criterion 8:** The relevant responsible parties have implemented plan provisions relating to access licence dealing rules (see **Chapter 12**)
- **Criterion 9:** The relevant responsible parties have implemented plan provisions relating to mandatory conditions (see **Chapter 13**)
- **Criterion 10:** The relevant responsible parties have implemented plan provisions relating to amendments (where these are not optional) and there is evidence that identified amendments (which may include optional amendments) have been given due consideration (see **Chapter 14**).

2.5 Audit procedures

Audit procedures included:

- document review, including overarching frameworks, procedures, guidelines, manuals, policies and reports
- interviews with process owners, implementers and users including:
 - auditee NSW responsible parties – DPIE-Water, NRAR and WaterNSW
 - other agencies with current role in implementing aspects of water sharing plans, such as Land Registry Services
- walk throughs of material activities, including key systems and processes with system implementors, owners and users
- sampling of available data.

These procedures were carried out on a test basis to provide sufficient appropriate evidence to provide a limited assurance conclusion.

2.6 Limitations

This audit was a limited assurance engagement. The procedures performed in a limited assurance engagement vary in nature and timing and are of lesser extent than for a reasonable assurance engagement. As such, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained through a reasonable assurance engagement.

Further, the audit cannot be relied on to comprehensively identify all weaknesses, improvements or areas of non-compliance. Inherent limitations mean that there is an unavoidable risk that some material matters may not be detected, despite the audit being properly planned and executed in accordance with the standards outlined in **Section 2.3**.

2.7 Exclusions

The audit has not provided an assessment against all provisions or parts in the plans. Specifically, it does not assess the:

- introduction (Part 1)
- bulk access regime and environmental water (typically parts 3 and 4)
- requirements for water (typically Part 5).

It has not examined or provided an opinion regarding:

- compliance or non-compliance of individuals
- whether the plans are being implemented efficiently
- whether stated objectives are being achieved
- whether the plans are effective, appropriate or in line with the Act
- the relative importance of legislative provisions
- compliance with any legislation unrelated to the Act.

3 Audit context

3.1 Purpose of water sharing plans under the Act

Water sharing plans, like all water management plans, are subject to the objects, water management principles, requirements and general provisions in the Act.⁴

The following specific principles related to water sharing are stated in Section 5(3) of the Act and are part of a broader set of water management principles.⁵ The Act specifies that:

- a) *sharing of water from a water source must protect the water source and its dependent ecosystems, and*
- b) *sharing of water from a water source must protect basic landholder rights, and*
- c) *sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).*

Core provisions for water sharing plans are stated in Section 20 of the Act, which specifies matters that water sharing provisions in water sharing plans must address.

3.2 Challenges to implementing the water sharing plans

3.2.1 NSW water reforms and compliance has focussed on the Murray-Darling Basin

NSW Government agencies with a role in water management implementation are currently undertaking policy reforms, prioritising the implementation of the Murray-Darling Basin Plan, water resource plans and long-term environmental watering plans. This has contributed to the plans subject to this audit having fewer resources assigned for implementation.

In relation to compliance and enforcement, the *Natural Resources Access Regulator Act 2017* specifically provides that NRAR's priorities are to be set independently. These regulatory priorities are reviewed on a regular basis and published.⁶ Interviews with NRAR reinforced that the northern Murray-Darling Basin has been a regulatory priority in accordance with NRAR's risk assessments and therefore is the focus of proactive compliance activities.⁷ The Commission is not seeking to comment on the appropriateness of decisions regarding NRAR's compliance priorities.

Information provided by NRAR indicates that proactive compliance programs have occurred in Macleay, Nambucca, Brunswick and Clarence WSP areas over the audit period (see Chapter 13.3).

⁴ Objects, water management principles, requirements and general provisions for all water management plans are stated in sections 3, 5, 16 and 17 of the Act, respectively.

⁵ Section 5 of the Act.

⁶ NRAR (2019) *Natural Resource Access Regulator Regulatory Priorities 2019 – 2021*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0020/227324/NRARs-regulatory-priorities-2019-to-2021.pdf.

⁷ NRAR's routine monitoring program is focussed on the inland water sharing plan areas; *Ibid*; NRAR (n.d.) *Routine monitoring campaign map*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/monitoring-and-auditing/routine-monitoring-program/map>.

Across all plans, NRAR monitors and inspects reactively in response to reports of alleged breaches of water laws, incidents or other intelligence received. NRAR also receives reports of suspicious water activities from members of the public and other regulators such as councils. No documented risk assessment was provided to the Commission as part of this audit.

4.2.5 Roles and responsibilities have changed over time

There has been a complex history of changes in government agencies dealing with water management and regulation, and their roles and governance. Roles and responsibilities for various criteria have changed several times during the audit period. An investigation by the NSW Ombudsman into water compliance and enforcement reported that the high level of restructuring and moving of water administration functions and regulation between different government agencies has resulted in significant impacts on staff, loss of expertise and corporate knowledge, and disruptions to systems, strategy and continuity of service delivery.⁸

⁸ NSW Ombudsman (2017) *Investigation into water compliance and enforcement 2007-17*. Available at: https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0012/50133/Investigation-into-water-compliance-and-enforcement-2007-17.pdf.

4 Plan areas

This chapter provides an overview of the plan areas subject to this audit. **Figure 1** and **Figure 2** show the location of the plan areas.

Table 3: Summary of plan areas for the plans subject to this audit

Plan	Location/area	Major towns	Environmental values	Cultural values	Socioeconomic values
Brunswick Plan⁹	Brunswick, Belongil and Tallow catchments on the NSW Far North Coast 273 square kilometres	Byron Bay, Mullumbimby, Brunswick Heads	<ul style="list-style-type: none"> ▪ Nationally significant (Billinudgel Nature Reserve) and other protected wetlands ▪ Brunswick Heads Nature Reserve contains important estuarine habitat and endangered ecological communities ▪ Significant number of threatened fish, frog, bird and wet flora species 	<ul style="list-style-type: none"> ▪ The Arakwal people of the Bundjalung Nation are the traditional owners and custodians of the region, with Byron Bay a key meeting place ▪ Plan area contains indigenous land use agreement areas with the Bundjalung People of Byron Bay 	<ul style="list-style-type: none"> ▪ Tourism and retirement industries are increasingly valuable, based on amenity values (including waterways) ▪ Beef grazing, followed by fruit and nut production are the most valuable primary industries
Clarence Plan¹⁰	Clarence, Wollie River and Angourie-Redcliffe-Sandon catchments and Dorrigo Plateau on the NSW North Coast 22,650 square kilometres	Grafton, Maclean, Iluka, Yamba, Dorrigo and Bonalbo	<ul style="list-style-type: none"> ▪ Several wetlands protected under State Environmental Planning Policy (SEPP) 14, as well as communities of ecological significance ▪ Several national parks (around 20 percent of plan area), including Bundjalung, Tooloom, Nymboida, Yuraygir and Yaegl ▪ Significant number of threatened fish, frog, bird and wet flora species 	<ul style="list-style-type: none"> ▪ The Bundjalung Nation are the traditional owners and custodians of the region ▪ The Yaegl people have been the traditional custodians of the Country around Yamba, Iluka and Maclean ▪ The Githabul people are the custodians of the land covering the northern reaches of the Clarence catchment 	<ul style="list-style-type: none"> ▪ Beef, sugar cane and timber are key industries ▪ Commercial fishing and tourism increasing in Grafton and Yamba – the Clarence represents the largest estuary-based fishery in NSW ▪ Increasing aquaculture, primarily aquaculture
Clyde Plan¹¹	Clyde River and adjoining catchments between Broulee and Jervis Bay on the NSW South Coast 3,300 square kilometres	Batemans Bay, Sussex Inlet, Milton, Ulladulla and Huskisson	<ul style="list-style-type: none"> ▪ 47 percent of the Clyde River Catchment is protected in national parks and nature reserves, including wilderness areas ▪ Several wetlands of state and national significance, including the Clyde River estuary, valued for its good condition 	<ul style="list-style-type: none"> ▪ The Yuin people are the traditional custodians of the South Coast region ▪ One of the most significant areas is the Cullendulla Creek lowlands, containing burial, midden and artefact sites 	<ul style="list-style-type: none"> ▪ Batemans Bay is a major commercial centre, providing regional services and water-based tourism ▪ Batemans Bay and Clyde River support a significant oyster and commercial fishing industries ▪ Agriculture is focussed on dairy and nursery, seed and flower products, as well as small-scale wineries ▪ 44 percent of the catchment area is State forest
Deua Plan¹²	Deua River, Congo Creek and Meringo Creek catchments on the NSW South Coast 1,669 square kilometres	Moruya	<ul style="list-style-type: none"> ▪ 55 percent of the catchment is protected in national parks and nature reserves, including the Deua, Monga and Eurobodalla national parks – a further 10 percent is State forest and 18 percent is privately owned native vegetation ▪ 32 SEPP 14 protected wetlands, and Moruya estuary is nationally important for its sea grass and fish nursery ▪ Deua River supports a population of the vulnerable Australian grayling (<i>Prototroctes maraena</i>) and several threatened frogs, birds and wet flora 	<ul style="list-style-type: none"> ▪ The Yuin people are the traditional custodians of the South Coast region 	<ul style="list-style-type: none"> ▪ Agriculture covers 13 percent of the catchment, primarily grazing with some stonefruit ▪ Estuary supports small oyster industry and tourism ▪ 44 percent of the catchment area is State forest ▪ Population is expected to increase 40 percent by 2035

⁹ Data taken from Department of Primary Industries Water (2016). *Water Sharing Plan for the Brunswick Unregulated and Alluvial Water Sources Background Document*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0005/166838/brunswick-background.pdf

¹⁰ Data taken from Department of Primary Industries Water (2016). *Water Sharing Plan for the Clarence River Unregulated and Alluvial Water Sources Background Document*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0008/166841/clarence-background.pdf

¹¹ Data taken from Department of Primary Industries Water (2016). *Water Sharing Plan for the Clyde River Unregulated and Alluvial Water Sources Background Document*. Available at: https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0008/666674/background-document-clyde-unregulated-alluvial.pdf

¹² Data taken from Department of Primary Industries Water (2016). *Water Sharing Plan for the Deua River Unregulated and Alluvial Water Sources Background Document*. Available at: https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0010/666676/background-document-deua-unregulated-alluvial.pdf

Macleay Plan¹³	Macleay River area, including a large area of the northern tablelands on the NSW Mid North Coast 11,450 square kilometres	Armidale, Kempsey, Guyra, Walcha and South West Rocks	<ul style="list-style-type: none"> ▪ The Oxley Wild Rivers National Park is a World Heritage Area ▪ The floodplain includes endangered ecological wetland communities and nationally important wetlands valued for their representativeness, habitat and as drought refugia ▪ Several threatened bird and frog species 	<ul style="list-style-type: none"> ▪ The Dunghutti (Macleay River valley) and Anaiwan (northern tablelands) people are the traditional custodians of the region 	<ul style="list-style-type: none"> ▪ Beef cattle and sheep grazing for wool is dominant in the tablelands ▪ Dairying, beef cattle and fodder crops dominate the eastern portion ▪ The Macleay River estuary supports commercial fishing and oyster farming ▪ Manufacturing is a key industry, with water-based tourism also growing
Snowy Genoa Plan¹⁴	Snowy and Genoa river catchments in the Snowy Mountains region of NSW 10,077 square kilometres	Jindabyne, Berridale, Bombala, Dalgety, and Perisher and Thredbo resort villages	<ul style="list-style-type: none"> ▪ Large areas of conservation land – 35 percent in the Kosciuszko National Park ▪ Eight nationally important wetlands, including the Ramsar listed Blue Lake ▪ The entire 'Aquatic Ecological Community in the catchment of the Snowy River in NSW' is listed as an endangered ecological community ▪ Snowy River supports a population of Australian grayling 	<ul style="list-style-type: none"> ▪ At least five Aboriginal groups have a connection to the region, including the Bidwell Maap, Maneroo-Ngarigo, Wolgalu, Southern Monero/Yuin/Bolga and Wiradjuri peoples 	<ul style="list-style-type: none"> ▪ Four major dams used for electricity through the Snowy Mountains Hydro-electric scheme ▪ Sheep and cattle grazing is the major land use (39 percent of land) ▪ Tourism and associated services are major employers around the resort villages ▪ Forestry is a major employer in the Bombala region
Tuross Plan¹⁵	Tuross River Catchment and adjoining coastal catchments on the NSW South Coast 6,900 square kilometres	Tuross Head, Bodalla, Dalmeny, Kianga and Narooma	<ul style="list-style-type: none"> ▪ 70 percent of the plan area is national park, nature reserve or state forest, with another 15 percent in privately owned native vegetation ▪ 53 wetlands protected by SEPP 14, mostly in the Tuross estuary, which is nationally important and supports a population of Australian grayling ▪ Colia Creek also nationally important, one of only three sites to contain the endangered <i>Wilsonia rotundifolia</i> ▪ 12 threatened bird species, and several internationally protected migratory birds ▪ Wagonga Inlet is an important fish nursery, and contains valuable mangroves, seagrass bed and the protected estuary cod (<i>Epinephelus coioides</i>) 	<ul style="list-style-type: none"> ▪ The Brinja-Yuin people are the traditional owners and custodians of the region 	<ul style="list-style-type: none"> ▪ Oyster farming is an important industry, with around 80 leases in both the Tuross estuary and Wagonga Inlet ▪ Commercial fishing is not permitted in the Tuross estuary, with a focus on recreation fishing and other water-based tourist activities – commercial fishing occurs in Coila Lake ▪ Cattle grazing is the primary agricultural use, with some irrigated dairy farms ▪ Large demand for rural lifestyle properties
Nambucca Plan¹⁶	Nambucca River, Deep Creek and Oyster Creek catchments on the NSW North Coast 1,426 square kilometres	Nambucca Heads, Macksville, Bowraville, Scotts Head and Valla Beach	<ul style="list-style-type: none"> ▪ Nambucca estuary covers a significant portion of the plan area, with most of its wetlands are SEPP 14 protected – the estuary is an important migratory shorebird habitat ▪ The Nambucca River supports relatively moderate fish biodiversity and no threatened fish species, although the plan area includes threatened frogs and birds 	<ul style="list-style-type: none"> ▪ The Gumbaynggirr (north of the Nambucca River) and Dhanggati (south of the river) peoples are the traditional owners and custodians of the region ▪ Over 250 Aboriginal heritage sites 	<ul style="list-style-type: none"> ▪ The Nambucca Valley is an important regional hub, with growing manufacturing, service, and retail sectors ▪ Agriculture remains important, including beef cattle, dairy and horticulture ▪ Tourism and recreation also important

¹³ Data taken from Department of Primary Industries Water (2016). *Water Sharing Plan for the Macleay Unregulated and Alluvial Water Sources Background Document*. Available at: https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0008/666674/background-document-clyde-unregulated-alluvial.pdf

¹⁴ Data taken from Department of Primary Industries Water (2016). *Water Sharing Plan for the Snowy Genoa Unregulated and Alluvial Water Sources Background Document*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0008/166877/snowy-genoa-background.pdf

¹⁵ Data taken from Department of Primary Industries Water (2016). *Water Sharing Plan for the Tuross River Unregulated and Alluvial Water Sources Background Document*. Available at: https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0012/666678/background-document-tuross-unregulated-alluvial.pdf

¹⁶ Data taken from Department of Primary Industries Water (2016). *Water Sharing Plan for the Nambucca Unregulated and Alluvial Water Sources Background Document*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0008/166868/nambucca-unregulated-alluvial-background.pdf

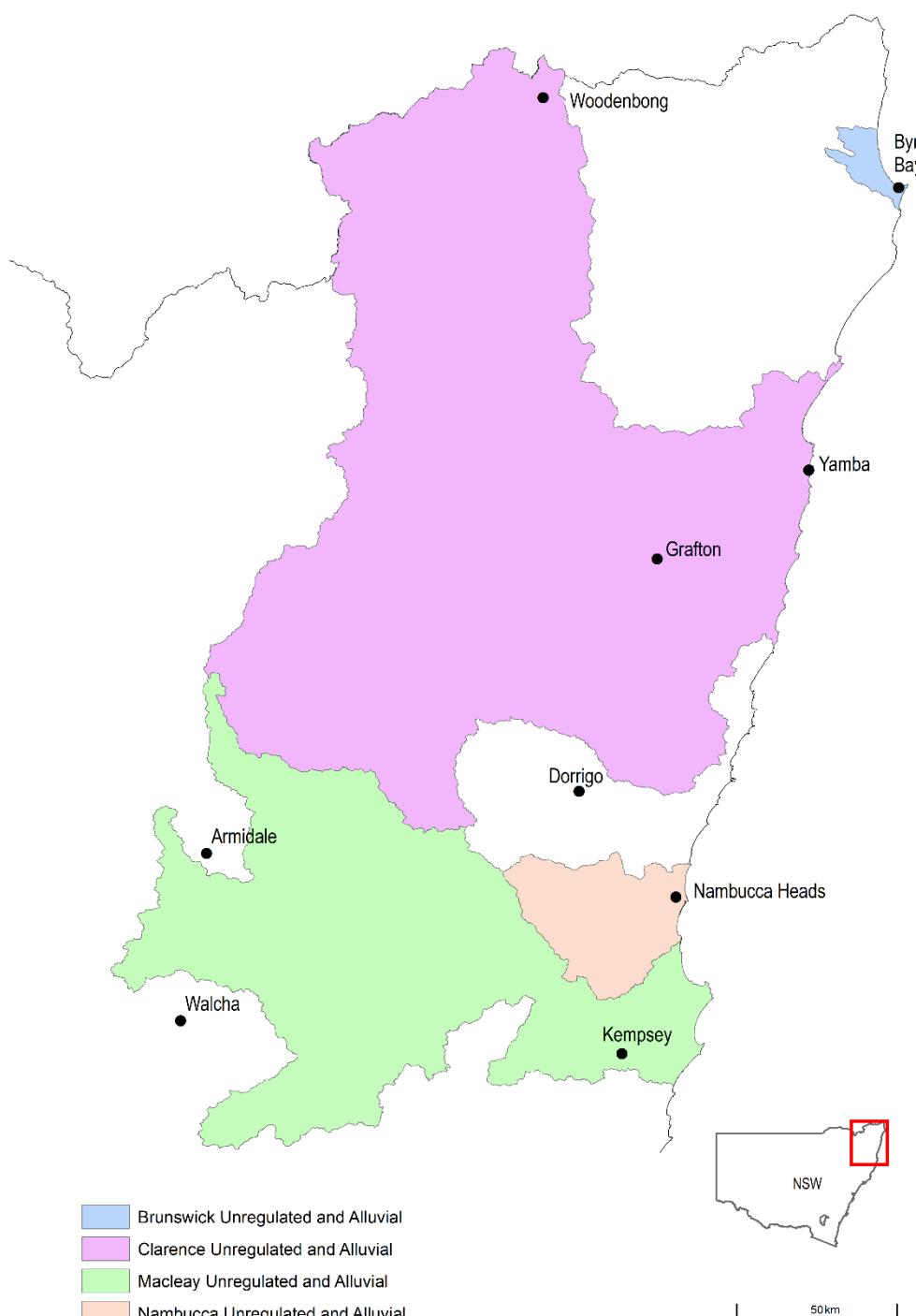
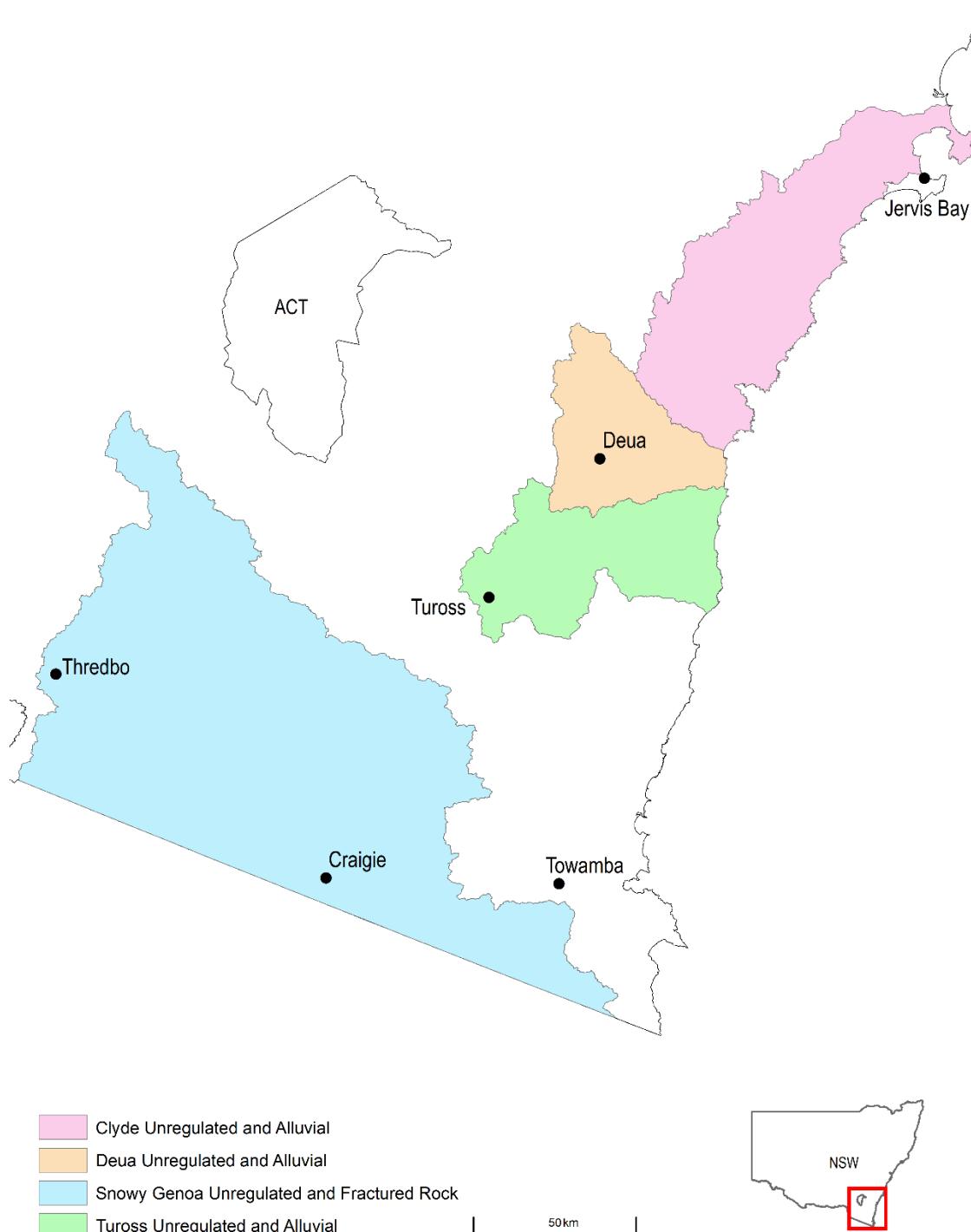


Figure 1: Locations of the North Coast unregulated and alluvial plans covered by this audit¹⁷

¹⁷ Map developed by the Commission from publicly available NSW and Australian government data.



Document Path: U:\MXDS\WATER\WSP audits\Draft maps\Draft Map - South Coast.mxd

Figure 2: Locations of the South Coast unregulated and alluvial plans covered by this audit¹⁸

¹⁸ Map developed by the Commission from publicly available NSW and Australian government data.

5 Criterion 1 – Vision, objectives, strategies and performance indicators

5.1 Criterion overview

Part 2 of each plan is made in accordance with Section 35(1) of the Act. This section requires water sharing plans to include a vision statement, objectives consistent with the vision statement, strategies for reaching objectives, and performance indicators to measure the success of strategies. The key clauses within Part 2 of each plan examined for this audit were:

- Clause 12 in the Brunswick, Clarence, Clyde and Nambucca plans
- Clause 13 in the Deua, Macleay, Snowy Genoa and Tuross plans.

These clauses state that '*the following performance indicators are to be used to measure the success of the strategies of this Plan to reach the objectives of this Plan...*'.

5.2 Current roles, systems and processes

DPIE-Water is the lead agency responsible for giving effect to performance provisions, including during the audit period. This includes using performance indicators to measure the success of the strategies in meeting plan objectives.

The Commission considers that there were no systems, processes, procedures to manage the implementation of plan provisions relating to monitoring performance to measure the success of the strategies in meeting plan objectives during the audit period.

5.3 Performance monitoring provisions have not been given effect to

DPIE-Water has not monitored or assessed performance indicators

While the plans include provisions to satisfy this requirement of the Act, the relevant agencies have not implemented them during the audit period.

DPIE-Water indicated that no active monitoring has been undertaken over the audit period and there is no formal assessment of performance indicators available or planned. While some data relevant to some performance indicators are being collected for some water sources in the plan areas, this information is not comprehensive or currently being used for the purpose of implementing Criterion 1.

For example, DPIE-Water has agreements in place with WaterNSW to undertake water quantity and salinity monitoring throughout the audit period, but this has not been used for the purpose of measuring the success of the strategies of these plans to reach the objectives of these plans.

The lack of implementation of these provisions is likely due in part to the lack of a robust monitoring, evaluation and reporting (MER) framework for the plans. Without this:

- the linkages between performance indicators and objectives are not clear
- the performance indicators are not specific, measurable, achievable, relevant and time-bound (SMART), and no metrics and targets have been set to better define these performance indicators.

The lack of MER is a significant and recurring issue across NSW that has been repeatedly highlighted by stakeholders, in previous Commission reviews,¹⁹ by the National Water Commission²⁰ and in Section 44 implementation audits undertaken in 2019 for other water sharing plans.²¹

5.4 Potential impacts

Performance indicators are key to measuring the success of plan strategies in meeting plan objectives. Potential impacts of not using performance indicators include having:

- no ability to determine and demonstrate if plan implementation aligns with the objects and principles of the Act (including to inform Section 43A plan reviews)
- no ability to benchmark or identify good practices that could be adopted in other water sharing plan areas
- no ability to transparently report on the achievement of plan outcomes
- insufficient information to make evidence-based decisions, apply adaptive management, or continually improve implementation
- no ability to measure the consequence of the partial or non-implementation of plan provisions (see remaining chapters in this report).

5.5 DPIE-Water is making efforts to improve MER

DPIE-Water indicated that MER implementation has not been a focus in the plan areas during the audit period. Instead, MER efforts have been prioritised in the Murray-Darling Basin, with several MER plans being developed to satisfy *Basin Plan 2012* requirements.

DPIE-Water staff indicated that work is progressing to improve inland MER planning that is intended to be rolled out to coastal areas as plans are replaced. The Commission is supportive of this and is of the view that DPIE-Water should lead the monitoring and evaluation of performance indicators and use generated data to support decision making for plan implementation. It should also ensure that planning efforts are comprehensive and associated funding accounts for implementation arrangements. For example, MER planning funding should not be allocated without measures to fund the implementation of MER plans.

¹⁹ Natural Resources Commission (n.d.) *Water sharing plan reviews*. Available at: <https://www.nrc.nsw.gov.au/wsp-reviews>.

²⁰ National Water Commission (2014) *The National Water Planning Report Card 2013*, p. 11. Available at: <http://www.agriculture.gov.au/SiteCollectionDocuments/water/2013-national-water-planning-report-card.pdf>; DPIE-Water (2018) *Audits of water sharing plans under Section 44 of the Water Management Act 2000*. Available at: <https://www.industry.nsw.gov.au/water/plans-programs/water-sharing-plans/water-sharing-plan-audits>.

²¹ DPIE-Water. (n.d.) *Audits of water sharing plans under Section 44 of the Water Management Act 2000*. Available at: <https://www.industry.nsw.gov.au/water/plans-programs/water-sharing-plans/audits>.

5.6 Recommendations and suggested actions

The Commission makes one recommendation and raises one suggested action.

R 1	The Commission recommends that DPIE-Water 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.
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Although not a specific requirement of the plans, public reporting is becoming increasingly important in relation to water sharing. It was a key theme in reports such as Ken Mathews' *Independent investigation into NSW water management and compliance*²² and in the NSW Government's *Water Reform Action Plan*.²³

Data accessibility to support transparency is consistent with the NSW Government's *Open Data Policy*²⁴ and its importance is highlighted in DPIE-Water's statement that '*we provide transparent stewardship of water resources, and deliver services and reforms which support sustainable and healthy environments, economies and societies*'.²⁵

Performance should be reported publicly so that all stakeholders (including community stakeholders) are informed on the extent to which plan objectives are being met.

SA 1	The Commission suggests that DPIE-Water publicly report on progress towards objectives of the Plan so that all stakeholders (including community stakeholders) are informed on the extent to which Plan objectives are being met.
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²² Ken Mathews (2017) *Independent investigation into NSW water management and compliance*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf.

²³ NSW Government (2017) *Securing our water NSW Government water reform action plan*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0015/312144/nsw-government-water-reform-action-plan.pdf

²⁴ NSW Department of Finance, Service and Innovation (2016) *NSW Government Open Data Policy*. Accessed 25 September 2020 at: <https://data.nsw.gov.au/nsw-government-open-data-policy>.

²⁵ DPIE-Water (n.d.) *Water*. Available at: <https://www.dpie.nsw.gov.au/our-work/water>.

6 Criterion 2 – Systems Operations

6.1 Criterion overview

Two of the eight plans subject to this audit report include system operations provisions. Provisions in Part 6 Clause 28 of both the Macleay and the Tuross plans establish the rules for system operations. Specifically:

- Clause 28 in the Tuross Plan includes provisions for Illawambra Dam releases
- Clause 28 in the Macleay Plan provides for Malpas Dam releases.

6.2 Current roles, systems and processes

Local councils are responsible for the operation of these two dams. Specifically:

- the Bega Valley Shire Council is responsible for managing releases from Illawambra Dam²⁶
- the Armidale Regional Council is responsible for managing releases from Malpas Dam.²⁷

The systems and processes used by councils to manage these rules is unknown. Illawambra Dam has not been used nor operated since 2003,²⁸ therefore provisions have not been triggered or tested.

Malpas Dam has a capacity of 13,000 ML and is operated by Armidale Council. It is located near Guyra on the Gara River toward the top of the Macleay catchment. Malpas Dam provides the primary town water supply for Armidale. The dam captures most inflows from the upstream Gara River and Urandangie Creeks. Malpas Dam is the major provider of town water to Armidale.²⁹

To comply with the rules in the Macleay Plan, Armidale Council installed an automatic release valve. Armidale Council staff indicated that due to dam overflow events preventing installation and commissioning from taking place at the identified site, this release valve was not operational until 1 May 2018. The valve was configured to perform dam releases automatically in accordance with plan rules set out in Clause 28.

NRAR is responsible for monitoring and enforcing compliance with these plans. NRAR staff indicated that there are no systems and processes to manage council compliance with plan provisions.

²⁶ Bega Valley Shire Council (n.d.) *Brogo-Bermagui water supply system*. Available at: https://begavalley.nsw.gov.au/cp_themes/default/page.asp?p=DOC-VTI-86-71-42

²⁷ Armidale Regional Council (2021). *Water Supply*. Available at: <https://www.armidaleregional.nsw.gov.au/environment/water-usage-and-supply/water-supply>

²⁸ Bega Valley Shire Council (n.d.) *Brogo-Bermagui water supply system*. Available at: https://begavalley.nsw.gov.au/cp_themes/default/page.asp?p=DOC-VTI-86-71-42; Water Sources section reads: “Illawambra Creek can supply Cobargo and some rural properties, but this source has not been used since 2003.”

²⁹ Department of Primary Industries Office of Water (2016). *Water Sharing Plan for the Macleay Unregulated and Alluvial Water Sources – Background Document*, pp. 22, 45-46. Available at: https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0010/659062/macleay-background-document.pdf

6.3 Systems operations rules have been given effect in all plans except the Macleay Plan, where provisions have partially been given effect

In absence of any monitoring or reporting information to NRAR, the Commission performed an analysis using publicly available gauge data.³⁰ The Commission found non-compliances with plan provisions on numerous (648) occasions across all sub-clauses in all years except 2019-20 water year, which had zero non-compliances:

- when inflows to Malpas Dam are less than 1 ML/day, we found 358 instances where releases were not made in accordance with Clause 28(2)(a)
- when inflows to Malpas Dam are between 1 and 6 ML/day, we found 135 instances where releases were not made in accordance with Clause 28(2)(b)
- when inflows to Malpas Dam are greater than 6 ML/day, we found 155 instances where releases were not made in accordance with Clause 28(2)(c).

Clause 28(3) states that these provisions do not apply when Dam levels were equal to or below 55 percent. This was the case between 24 April 2019 and 25 July 2020. Hence no instances of non-compliances were found during that period. The Commission confirmed that the requirements are currently included in the relevant water supply work approval held by Armidale Council (CA308672).

The Commission compared publicly available gauge data with Armidale Council's flow data for approximately a one-year period (commencing in May 2018) and found a similar number of non-compliances.

The Commission's analysis indicates that approximately 200 of these instances were within 20 percent of the target.

WaterNSW has indicated that both Gara River gauges (206035 Willow Glen and 206039 downstream Malpas Dam) are not suitable flow reference points to be used to manage compliance with the provisions of Clause 28 of the Plan, particularly at low flows. WaterNSW has indicated that this is due to the current site being inadequate and site visit frequency is limited at only four times per year. WaterNSW also indicated that the rating changes since 2016 have been significant.

Armidale Council staff indicated that an automatic release valve has been set up for the purpose of making these releases, and that it is suitably maintained. However, Armidale Council acknowledged that the automatic release valve programming does not take into account any changes to the rating curve made by WaterNSW. This may impact the volume of the automatic releases. Rating change information should be shared with Armidale Council by WaterNSW.

The reason for the non-compliances as recorded by the river gauges could be due to a range of reasons for example actual flow releases or instrumentation. The Commission has not sought to investigate this matter to determine the technical solution or explanation, just to highlight a potential issue, using the publicly available data.

³⁰ Gauge data for Gara River d/s Malpas Dam (206039) and Willow Glen gauge (206035) taken from: WaterNSW (n.d.) *Realtime data*. Available at: <https://realtimedata.waternsw.com.au/> from 1 July 2016 to March 2021

If the gauging stations are not suitable to support measurement of low flows and are not suitable to be used as flow reference points, then other options should be explored. These could include:

- removing either or both Gara River gauges (206035 Willow Glen and 206039 downstream Malpas Dam) as a flow reference point in the Plan and amending the flow rules to ensure environmental objectives can be met
- commissioning (a) new gauge(s) if appropriate in the water sources
- identifying other gauges that may be appropriate to use liaise with Armidale Council to investigate whether existing infrastructure at Malpas Dam can be utilised to measure flows
- identifying an appropriate rating schedule ensuring site controls are adequate.

In relation to monitoring and enforcement:

- Armidale Council's water supply work approval (CA308672) does not require the Council to report or record performance against Clause 28 requirements in the Macleay Plan.
- NRAR staff indicated that there has been no monitoring or enforcement activities in relation to performance against Clause 28 of the Macleay Plan. This situation is not unique to Armidale Council, NRAR staff indicated that this is the case for most local water utilities across NSW for environmental flow release provisions in water sharing plans.
- NRAR staff indicated that there are plans to introduce suitable monitoring and reporting requirements for all plan provisions specific to local water utilities across NSW in the future, and the Commission encourages this approach.

6.4 Potential Impacts

The background document for the Macleay Plan indicates that previous arrangements were insufficient for downstream flows for extractive and environmental values. These new plan provisions mimic flow variability in the system and were intended to provide additional water for environmental and consumptive uses, providing more certainty in timing and release volumes. Modelling prior to plan commencement showed that the dam's town water supply role would not be compromised if additional releases were to occur and so bypass rules were drafted in agreement with Armidale Council that were intended to improve outcomes for downstream:

- users via the provision of more water (particularly in lower flows) more often, improved transparency and security in the timing of releases
- environmental values via the delivery of greater and more varied flows.³¹

The potential impact of not delivering the Malpas Dam releases in accordance with Clause 28 is that there are insufficient downstream flows for downstream users and environmental values.

³¹ Department of Primary Industries Office of Water (2016). *Water Sharing Plan for the Macleay Unregulated and Alluvial Water Sources – Background Document*, p. 46. Available at: https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0010/659062/macleay-background-document.pdf

Downstream environmental values include the Oxley Wild Rivers National Park. The park is part of the Central Eastern Rainforest Reserves of Australia (CERRA) World Heritage Area³² in recognition of its rich biodiversity that includes several rare or threatened plants and animals.³³ Known threatened species that are sensitive to low flows in the Gara River include the Booroolong Frog, the Peppered Frog, the Tusked Frog.³⁴

6.5 Recommendations and suggested actions

The Commission makes three recommendations to improve performance against Clause 28 in the Macleay Plan and raises no suggested actions.

Given the Plan provisions are based on gauge data, to ensure compliance with Plan provisions, Armidale Council should be cross checking its own generated flow meter data at the automatic release valve with publicly available gauge data and ensuring any issues are identified and addressed. However, for this to be effective, the flow reference points need to be adequate to enable real time decision making and management of these dam releases in accordance with Clause 28.

NRAR staff indicated that there are plans to introduce suitable monitoring and reporting requirements for all plan provisions specific to local water utilities across NSW in the future, and the Commission encourages this approach.

If NRAR was monitoring performance on an annual basis, issues are more likely to be identified early and adjustments made to increase the likelihood of intended outcomes being achieved.

R 2.1	NRAR to monitor and manage performance to ensure requirements in Clause 28 in the Macleay Plan are met.
R 2.2	DPIE- Water to ensure that the two river gauging stations at Gara River - Willow Glen gauge (206035) and downstream Malpas Dam gauge (206039) - are appropriate to measure low flows and to be used as flow reference points to enable real time management of environmental releases. If these gauges or their controls are deemed unsuitable, consider other options to enable appropriate and measurable environmental releases are made to achieve objectives.
R 2.3	WaterNSW to share rating change information with Armidale Council for the two river gauging stations at Gara River - Willow Glen gauge (206035) and downstream Malpas Dam gauge (206039) - to ensure the automatic release valve programming is reflective of Willow Glen (206039) gauge flows.

³² Department of Primary Industries Office of Water (2016). *Water Sharing Plan for the Macleay Unregulated and Alluvial Water Sources – Background Document*, p. 18. Available at:

https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0010/659062/macleay-background-document.pdf

³³ NSW National Parks and Wildlife Service (2005). *Oxley Wild Rivers National Park, Oxley Wild Rivers State Conservation Area, Cunnawarra National Park and Georges Creek Nature Reserve Plan of Management*. Available at: <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management/oxley-wild-rivers-cunnawarra-georges-creek-parks-plan-of-management-050627.pdf>

³⁴ Department of Primary Industries Office of Water (2016). *Water Sharing Plan for the Macleay Unregulated and Alluvial Water Sources – Background Document*, p. 57. Available at:

https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0010/659062/macleay-background-document.pdf

7 Criterion 3 - Long-term average annual extraction limits

7.1 Criterion overview

The purpose of Part 6 Division 1 of the Brunswick, Clarence, Clyde, Deua, Snowy Genoa and Nambucca plans and Part 7 Division 1 of the Macleay and Tuross plans is to set out how '*the availability of water for extraction in these water sources on a long-term basis is to be managed*'.³⁵

The plans include provisions that establish LTAAELs in accordance with the Act. The relevant clauses in each plan require:³⁶

- calculation of current levels of annual extraction after each water year
- assessment of the average annual extraction for the preceding three water years against LTAAELs from the fourth water year the plan has effect
- compliance with the LTAAELs to be assessed from the fourth water year the plan has effect – if extraction exceeds LTAAEL by 5 percent or more then the available water determination (AWD) is to be reduced in the following water year.

7.2 Current roles, systems and processes

A summary of agency roles is as follows:

- **DPIE-Water** is responsible for implementing LTAAEL provisions in the plans, including the assessment of compliance of take in accordance with plan provisions. According to DPIE-Water, this includes developing procedures to implement LTAAEL provisions and providing associated modelling services.
- **WaterNSW** is responsible for managing water accounts, including for access licences in the plans. WaterNSW's Operating Licence states that WaterNSW must determine the volume of water extracted by, or supplied to, each of its customers, at least annually, for the purpose of accurate account management, billing and reporting.³⁷ However, accurate and comprehensive water usage data is not available to WaterNSW or DPIE-Water for the purposes of supporting LTAAEL assessment and compliance.

The Commission considers that there were no systems, processes or procedures in place to support the implementation of Plan provisions relating to LTAAEL during the audit period.

³⁵ Clause 28-32 in the Brunswick Plan, Clause 28-32 in the Clarence Plan, Clause 27-30 in the Clyde Plan, Clause 28-31 in the Deua Plan, Clause 30-34 in the Macleay Plan, Clause 29-32 in the Snowy Genoa Plan, Clause 30-33 in the Tuross Plan and Clause 27-31 in the Nambucca Plan.

³⁶ Relevant sections of the Act relating to LTAAELs include: Section 8F requires the auditing of compliance with the long-term extraction limit under a water sharing plan; Section 20(2)(a) requires the bulk access regime established by a water sharing plan to recognise and be consistent with any limits to the availability of water that are set (whether by the relevant management plan or otherwise) in relation to the water sources to which the regime relates; and Section 8(1A)(b) requires a water sharing plan to commit water as planned environmental water in at least two ways, including by reference to the long-term average annual commitment of water as planned environmental water.

³⁷ State of NSW (n.d.) *Water NSW Operating Licence 2017-2022*, Clause 6.3.1, p.16. Available at: https://www.waternsw.com.au/_data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf.

7.3 LTAAEL provisions have not been given effect to

DPIE-Water has not assessed LTAAEL compliance

DPIE-Water has not implemented plan provisions relating to limits to the availability of water, specifically LTAAELs, in the plans. DPIE-Water advised that there are currently no systems, processes and procedures in place to manage LTAAELs in the plans.

No alternative method has been developed to enable an assessment of LTAAEL compliance in lieu of comprehensive extraction data.

Comprehensive extraction data is not available to inform LTAAEL assessment and compliance

The accurate measurement and reporting of water use by all water users or an assessment methodology is required to assess LTAAELs and LTAAEL compliance.

There is currently limited metering of use in the unregulated and alluvial systems managed by the plans. As such, the assessment of average annual extraction over the first three years of the plans was not completed, which meant DPIE-Water was unable to assess LTAAEL compliance in the fourth year of the plans and on an ongoing basis.

Review of meters and telemetry data by WaterNSW customer field officers to determine water take by customers is risk-based. There are no customer field officers in the plan areas, as they are mostly assigned to regulated rivers and inland rivers under the risk-based approach.

Extraction measurement has been attempted but has not yet provided adequate data:

- WaterNSW advised that it collects some water use data through voluntary customer reporting through the Internet Water Accounting System (iWAS), as well as a small amount of meter-read data. However, this information is not comprehensive across all accounts or across the audit period. The Commission considers that water usage data could be efficiently collected through a process attached to billing processes for licence holders. This would be consistent with provisions in the plans but would require licence holders to accurately report on their usage.
- In 2018, the Independent Pricing and Regulatory Tribunal (IPART) reported that WaterNSW had a material non-compliance with the accuracy of its water account management, billing and reporting during the audit period.³⁸ IPART recommended that WaterNSW should set objectives for and assess the accuracy of its water take estimates for the purposes of billing, account management and reporting. WaterNSW developed procedures that may address these recommendations. This should be followed up in future audits by considering future IPART reports on compliance with the WaterNSW operating licence.

³⁸ IPART (2019) *2018 WaterNSW Operational Audit*. Available at:
<https://www.ipart.nsw.gov.au/Home/Industries/Water/Reviews/Licensing-WaterNSW/2018-WaterNSW-Operational-Audit/27-Feb-2019-IPARTs-Report-to-Minister/Report-to-the-Minister-WaterNSW-Operational-Audit-2017-18-27-February-2019>.

- While mandatory conditions require water users to record their usage,³⁹ reporting of logbook information is not currently required and logbooks are not routinely checked. In the plan areas, mandatory conditions were either delayed in being implemented or are still not yet implemented (see **Chapter 9** (Criterion 5 - Granting access licences), **Chapter 11** (Criterion 7 - Rules for water supply work approvals) and **Chapter 13** (Criterion 9 - Mandatory Conditions)).

7.4 Potential impacts

By not implementing LTAAEL provisions, DPIE-Water is not monitoring annual extraction in relation to LTAAEL and not able to determine whether extraction adjustments are required.

Without extraction data or robust estimation methods of extraction, it is unknown if current extraction is causing significant harm to the environment.

7.5 DPIE Water is making efforts to improve

DPIE Water is making efforts to improve extraction data availability

Implementation of the new metering policy will result in improved data availability to support LTAAEL compliance assessment.⁴⁰

While metering requirements under the *Water Management (General) Regulation 2018* (the Regulation) will make some metered usage data available, all water users will not be captured.

However, the *NSW Non-Urban Water Metering Policy* will require annual reporting for water take that is exempt from metering requirements from 1 December 2023. The authority holder must report within 28 days after the 30 June each year.⁴¹

This effectively means that LTAAEL compliance assessments will remain unable to be tested until these requirements commence in 2023, unless additional water use information requirements are implemented. These could include:

- comprehensive mandatory metering requirements
- mandatory reporting requirements
- additional methods for measuring or estimating water use.

DPIE Water is improving LTAAEL compliance assessment methodology

DPIE-Water has started to pilot a process to develop and document steps that can be used to inform and guide an approach for the assessment and compliance of LTAAEL in the northern Murray-Darling Basin. DPIE-Water advised that there will be a delay in implementing LTAAEL compliance assessment of coastal systems due to a focus on compliance in inland plan areas.

³⁹ Mandatory conditions regarding keeping, recording, producing and retaining logbooks: Brunswick and Clarence Part 11, Clause 66(2) and 67(2); Clyde Part 11, Clause 62(2) and 63(2); Deua Part 11, Clause 63(2) and 64(2); Macleay Part 12, Clause 70(2) and 71(2); Snowy Genoa Part 11, Clause 62(2) and 63(2); Tuross Part 12, Clause 63(2) and 64(2); and Nambucca Part 11, Clause 65(2) and 66(2).

⁴⁰ DPIE (2020) *NSW Non-Urban Water Metering Policy*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/312335/nsw-non-urban-water-metering-policy.pdf.

⁴¹ *Ibid*, p. 21.

DPIE-Water staff indicated that DPIE-Water is waiting for metering to be rolled out across the coastal water sharing plan areas before a method to assess LTAAEL compliance in those systems is developed.

To ensure extraction can be managed, DPIE-Water should develop a method to assess LTAAEL compliance. Extraction data could be obtained or estimated in many ways, including meter installation with meter reads or telemetry, mandatory reporting of usage by licence holders, or through alternative estimation methods. Additional ways in which comprehensive and accurate water use data can be obtained to cover all water users should be explored and implemented across NSW, including for coastal unregulated and alluvial systems.

DPIE-Water should lead a process to determine an efficient and effective method to obtain adequate data to inform an LTAAEL compliance assessment. WaterNSW should support DPIE-Water as required to assist in providing data it holds.

7.6 Recommendations and suggested actions

The Commission makes one recommendation and raises two suggested actions.

Currently LTAAEL compliance is not being carried out in accordance with plan provisions.

R 3	DPIE-Water to manage Long Term Average Annual Extraction Limits (LTAAEL) and assess LTAAEL compliance for these coastal unregulated and alluvial plans in accordance with Part 6 or 7 Division 1 (as relevant) of each coastal unregulated and alluvial plan.
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While DPIE-Water staff understand that LTAAEL compliance work is the responsibility of DPIE-Water, they advised that these roles and responsibilities are not documented. Documents provided by DPIE-Water were outdated, referring to agencies that no longer exist, and did not cover current roles and responsibilities.

Multiple departmental restructures before and during the audit period resulting in the creation of new water management bodies may have contributed to the lack of clearly documented roles and responsibilities for LTAAEL compliance work.

DPIE-Water staff advised that an implementation program is being developed for LTAAEL provisions, which will document DPIE-Water's role and responsibilities. However, this is currently focussed on inland and regulated systems and will likely not be able to be directly applied in coastal areas. The Commission suggests that this work be used as a foundation to develop a program suitable for coastal systems and should include documentation of systems, processes and procedures.

SA 3.1	DPIE-Water to document the roles, responsibilities, systems, processes and procedures relevant to Long Term Annual Average Extraction Limit (LTAAEL) management and compliance for the Coastal Unregulated and Alluvial systems.
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Extraction data could be obtained or estimated via a multitude of ways, meter installation with meter reads or telemetry, mandatory reporting of usage by licence holders, or through alternative estimation methods. Additional ways in which comprehensive and accurate water use data can be obtained to cover all water users should be explored and implemented across the State, including for unregulated and alluvial water sources.

DPIE-Water should lead a process of determining an efficient and effective method for obtaining adequate data to inform LTAAEL assessment and compliance. WaterNSW should support DPIE-Water as required to assist in providing data it holds or acquiring data.

SA 3.2	DPIE-Water to obtain reliable extraction data and use it to assess Long Term Annual Average Extraction Limit (LTAAEL) compliance for the Coastal Unregulated and Alluvial plans in accordance with Part 6 or 7 Division 1 (as relevant) of each plan.
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8 Criterion 4 – Available water determinations

8.1 Criterion overview

Provisions in the plans establish rules for AWDs, as required under sections 20(2)(b), 59 and 60 of the Act. Specifically, Division 2 of Part 6 or 7⁴² (as relevant) for each plan sets out these requirements. Relevant provisions are set out in:

- clauses 33-37 of the Brunswick Plan
- clauses 33-37 of the Clarence Plan
- clauses 31-35 of the Clyde Plan
- clauses 32-36 of the Deua Plan
- clauses 35-39 of the Macleay Plan
- clauses 32-35 of the Nambucca Plan
- clauses 33-35 of the Snowy Genoa Plan
- clauses 34-36 of the Tuross Plan.

Generally, AWDs in the plans are limited to either 100 percent of the access licence share component or 1 ML per unit share component, with the exclusion of a higher AWD in the first year of commencement for all plans. All plans have provisions for AWDs to be adjusted based on compliance with LTAAEL assessments outlined in Division 1 of Part 6 or 7⁴³ (as relevant) for each plan.

8.2 Current roles, systems and processes

DPIE-Water is responsible for preparing and issuing AWD orders and making water allocation announcements on 1 July of each water year and periodically throughout the year.^{44,45} AWDs are given effect to by a statutory water order, which are published on DPIE-Water's website. These orders provide authorisation for WaterNSW to credit the accounts of licensed water users with the available water specified in the order.⁴⁶ This then allows licensed users to take that additional water in accordance with their account balance and license conditions.⁴⁷

DPIE-Water staff advised that it is responsible for reducing the AWD if the LTAAEL compliance assessment shows that the LTAAEL has been exceeded in accordance with the plan provisions (see **Chapter 7 - Criterion 3- Long term average annual extraction limits**).

⁴² Part 7 relates only to Macleay and Tuross plans.

⁴³ Part 7 relates only to Macleay and Tuross plans.

⁴⁴ DPIE-Water (n.d.) *Available Water Determinations*. Available at:

<https://www.industry.nsw.gov.au/water/allocations-availability/allocations/determinations>.

⁴⁵ DPIE_Water (n.d.) *Water Allocation Statements*. Available at:

<https://www.industry.nsw.gov.au/water/allocations-availability/allocations/statements>

⁴⁶ DPIE-Water (n.d.) *Available Water Determinations*. Available at:

<https://www.industry.nsw.gov.au/water/allocations-availability/allocations/determinations>.

⁴⁷ *Ibid.*

WaterNSW is responsible for maintaining water allocation accounts for WALs.⁴⁸ It uses the WAS to keep account information for each WAL holder and adjust the accounts each year as required by the AWD order for the relevant plan. WaterNSW also publish water allocations and AWDs on the NSW Water Register.

8.3 AWD provisions were partially implemented

DPIE-Water and WaterNSW partially implemented plan provisions relating to limits to the availability of water, specifically AWDs, for all plans in the audit period. DPIE-Water made AWD orders but did not consider LTAAEL compliance assessment

To assess if plan provisions were given effect, the Commission examined the AWD orders made for the plans in the audit period.

This analysis found that, while DPIE-Water made and published AWD orders in accordance with requirements for all plans, no consideration was given to adjustments required under LTAAEL provisions (see **Chapter 7**- Criterion 3- Long term average annual extraction limits). As discussed in **Chapter 7**, DPIE-Water has not undertaken LTAAEL assessment and compliance activities for the plans during the audit period. As such, there have been no reductions to AWD during the audit period.⁴⁹

Due to the lack of metering in the plan areas (see **Chapter 7** - Criterion 3 - Long term average annual extraction limits), DPIE-Water staff advised they assume water use under access licence is less than the LTAAEL and therefore there is no trigger to reduce AWD. AWD amounts are therefore generally set at the limit allowed under the rules established in these plan areas.

AWDs were correctly applied to accounts, except in the Snowy Genoa, Clyde, Nambucca, Macleay and Deua plans in the 2016-17 water year.

To assess if plan provisions were given effect, the Commission examined the AWDs listed in the NSW Water Register. WaterNSW advised that these figures reflect the AWDs applied to accounts in the WAS by WaterNSW for the plans in the audit period.

The Commission's analysis found that WaterNSW correctly applied AWDs to water allocation accounts for WALs in the audit period in accordance with AWD orders. This was done consistently for all years in the audit period across the plans, except that in the Snowy, Clyde, Nambucca, Macleay and Deua plans, a 100 percent AWD was applied to accounts across multiple WAL categories instead of 200 percent per the AWD order in the 2016-17 water year. This was observed across aquifer, local water utility, unregulated river, and domestic and stock WAL categories.

This means that WAL holders in these water sources would not have had access to the full amount of water they could take in that year. However, as water users are generally unmetered it is unclear how they would have applied the AWD limits accurately.

⁴⁸ State of NSW (n.d.) *Water NSW Operating Licence 2017-2022*. Clause 6.2.1, p.15. Available at: https://www.waternsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf

⁴⁹ LTAAEL compliance assessment is required under plan provisions, specifically: clauses 31 and 32 in Brunswick and Clarence plans, Clause 30 in the Clyde Plan, Clause 31 in the Deua Plan, Clauses 33 and 34 in the Macleay Plan, Clause 32 in the Snowy Genoa Plan, Clause 33 in the Tuross Plan and clauses 30 and 31 in the Nambucca Plan.

In response to draft audit findings, WaterNSW staff have rectified these numbers in the system to reflect correct AWDs for 2016-17, to improve accuracy of accounts. These corrections are logged in the WAS audit trail and so are transparent.

WaterNSW staff in interview indicated that in 2016-17 the AWD were provided in a format to WaterNSW that required manual upload. This was required to be done across tens of thousands of accounts, resulting in some errors in 2016-17. In 2017-18 DPIE-Water began providing electronic upload files to WaterNSW reflecting the AWD orders, which has improved the accuracy and efficiency of applying AWDs to accounts. The Commission found AWD were accurately applied to accounts from 2017-2021. On this basis, the Commission is of the view that the system and process for applying AWDs to accounts in accordance with AWDs going forward is adequate and makes no recommendation.

Inconsistent information in the NSW Water Register in relation to the AWD applied to accounts in the 2016-17 water year

In 2016-17, the data in the NSW Water Register is not clear on a number of occasions whether 100, 200 or 300 percent was applied to accounts. Depending on the search screen used in the NSW Water Register, the AWD amounts applied is different. This issue was identified in the Deua, Macleay, and Nambucca plans across Local Water Utility, Unregulated River and Domestic and Stock WAL categories. This is partly to do with sub-categorisation of WAL category and partly to do with the fact that the NSW Water Register can only be searched by water source, and not by water source within a specific water sharing plan. Where water sources exist in two water sharing plans, this makes it difficult to search for information and limits transparency.

8.4 Potential impacts

The adequacy of the evidence base and methods used by DPIE-Water to determine the AWD amounts could not be determined. Therefore, whether the basis for the assumption that an AWD equal to the maximum allowable under the plans is appropriate is unknown and the level of associated risk is not transparent.

The errors in AWD application to accounts in 2016-17 is not material in these plans as there is very little metering and monitoring and managing of information across these systems. So, the application of AWD is largely theoretical.

8.5 Recommendations and suggested actions

The Commission makes one recommendation and raises two suggested actions.

DPIE-Water should obtain and use extraction data from the preceding years to inform AWD as required by the plans. This process will require the LTAAEL provisions discussed in the assessment of Criterion 3 to be given effect, specifically assessment of LTAAEL compliance (see Chapter 7 - Criterion 3- Long term average annual extraction limits).

R 4.1	DPIE-Water to implement R 3 and use the LTAAEL compliance assessment to inform Available Water Determinations adjustments as required by Division 2, Part 6 or 7 (as relevant) of each plan.
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There are no documented procedures or methods for determining how an AWD amount is calculated for the plans. There is also no documentation of assumptions and available evidence to support the current approach to establishing AWDs.

DPIE-Water is currently documenting roles and other matters related to implementation program areas and starting to draft water allocation summary manuals for regulated plans. As part of this, DPIE-Water should ensure this process includes documentation of the roles systems and processes relevant to determining AWD amounts for coastal unregulated and alluvial systems.

SA 4.1	DPIE-Water to document the roles and responsibilities, systems, processes and procedures relevant to determining Available Water Determination amounts for coastal unregulated and alluvial systems.
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To improve transparency of information in relation to AWDs in the NSW Water register in relation to the AWD amounts applied to accounts, the Commission suggests the following.

SA 4.2	WaterNSW to ensure that Water Register is transparent in terms of how sub-categories are applied to WALs and to enable water sources to be clearly searchable within a water sharing plan to improve transparency of how AWDs were applied to accounts.
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9 Criterion 5 – Granting access licences

9.1 Criterion overview

Part 7 of the Brunswick, Clarence, Clyde, Deua, Snowy Genoa and Nambucca plans and Part 8 of the Macleay and Tuross plans set out the rules for granting WALs in accordance with the provisions of the Act and Clause 10 of the Regulation in relation to:

- specific purpose access licences applied for under Section 61(1)(a) of the Act⁵⁰
- granting of access licences applied for and granted under Section 61(1)(c) of the Act⁵¹ in relation to a controlled allocation order.

This audit has focussed on the following in relation to WALs applied for and granted in the audit period:

- Section 61 of the Act (application for granting of WALs including zero-share WALs⁵²), except Section 61(3)
- Section 63 of the Act (determination of applications)
- Section 64 of the Act (notice of decision)
- Section 65 of the Act (controlled allocation of WALs)
- Section 66 (mandatory conditions included in the terms of the licence)⁵³
- Section 71B of the Act (giving effect to WALs through recording on WAL Register)
- Clause 10 of the Regulation (specific purpose access licences)
- Schedule 3 of the Regulation (categories and subcategories of licences).

In relation to pre-existing water access entitlements at plan commencement the following were examined:

- Section 71B of the Act (giving effect to WALs through recording on WAL Register)
- Schedule 10 clauses 20(1) and 20(2) of the Act (notification of mandatory conditions for former entitlements under the Water Act 1912)
- Sections 67(4) and 67(5) of the Act (requires notification of revised mandatory conditions for WALs granted under previous plans made under the Act).

Section 61(3) of the Act was not examined as it relates to applications outside of water sharing plan areas.

⁵⁰ Clause 38 of the Brunswick Plan, Clause 38 of the Clarence Plan, Clause 36 of the Clyde Plan, Clause 37 of the Deua Plan, Clause 40 of the Macleay Plan, Clause 36 of the Nambucca Plan, Clause 36 of the Snowy Genoa Plan and Clause 37 of the Tuross Plan.

⁵¹ Clause 39 of the Brunswick Plan, Clause 39 of the Clarence Plan, Clause 37 of the Clyde Plan, Clause 38 of the Deua Plan, Clause 41 of the Macleay Plan, Clause 37 of the Nambucca Plan, Clause 37 of the Snowy Genoa Plan and Clause 38 of the Tuross Plan.

⁵² The Plans are silent in relation to zero-share licences, which are processed and granted under the provisions of the Act.

⁵³ Note the Commission only assessed if a notification of mandatory conditions was undertaken in examining Criterion 5, a detailed assessment of the mandatory conditions is undertaken as part of Criterion 9 (see Chapter 13).

Section 62 of the Act (objections to granting of WALs) was not examined as it was not relevant to the plans being audited, given it relates to water in an area that is not within a water management area, or water in a water management area for which there is no water sharing management plan in force.

9.2 Current roles, systems and processes

A summary of agency roles is as follows:

NRAR and WaterNSW are currently responsible for granting WALs. NRAR is responsible for public authorities,⁵⁴ while WaterNSW is responsible for rural landholders, rural industries and developments that are not state significant development or state significant infrastructure. Prior to the establishment of NRAR in April 2018, DPIE-Water predecessors granted licences for public authorities and state significant developments.

WaterNSW is responsible for notification of all holders of pre-existing entitlements upon the commencement of a new water sharing plan under the Act.

In water sources that are not fully committed, the right to apply for WALs can be provided through a controlled allocation order. DPIE-Water organises controlled allocation orders, which are published in the NSW Government Gazette and announced on DPIE-Water's website.⁵⁵

WALs specify mandatory conditions, which are requirements the licence holder must comply with. Section 66(1A) of the Act requires that mandatory conditions be included in the terms of the licence for them to have effect. Since September 2019, DPIE-Water is responsible for creating, entering and coding the mandatory conditions into the water licencing system (WLS). Prior to that, this was the responsibility of NRAR from April 2018 and before that DPIE-Water predecessors. NRAR and WaterNSW are responsible for imposing mandatory conditions on licences.

The main systems used to grant access licences are the:

- **Water Licencing System (WLS)** – used by WaterNSW and NRAR to process all applications and record applications, assessments, communication with stakeholders, and decisions. The system generates the statement of approval, statement of conditions, the notice of decision and the cover letter that are sent to the WAL holders.
- **NSW Water Register** – operated by WaterNSW to make some information regarding WALs available to the public.⁵⁶

⁵⁴ NRAR is responsible for water access licences required by or for; government agencies, including NSW and Commonwealth government agencies and councils; state-owned corporations; major water utilities, water supply authorities and licensed network operators under the *Water Industry Competition Act 2006*; entities who are carrying out activities under the *Mining Act 1992*, *Offshore Minerals Act 1999*, *Petroleum (Onshore) Act 1991* or *Petroleum (Offshore) Act 1982*; irrigation corporations; public schools and public hospitals; entities who hold or are eligible to hold an Aboriginal commercial, Aboriginal community development, Aboriginal cultural or Aboriginal environmental subcategory of access licence; entities undertaking major developments (state significant developments and state significant infrastructure); those engaged in floodplain harvesting (NRAR (n.d.) *Licensing and approvals*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/licensing-and-approvals>).

⁵⁵ DPIE-Water (n.d) *Controlled allocations*. Available at: <https://www.industry.nsw.gov.au/water/allocations-availability/controlled>.

⁵⁶ WaterNSW (n.d.) *NSW Water Register*. Available at: <https://waterregister.waternsw.com.au/water-register-frame>.

- **WAL Register** – provides an online record of every WAL in NSW. Land Registry Services is responsible for operating and maintaining the WAL Register.⁵⁷

The main procedural and process documents used by WaterNSW, NRAR and DPIE-Water to support the granting of access licences are:

- **The Licensing Procedure Manual – Operations Section** – which sets out requirements for receiving, assessing and determining an application for a water access licence
- **Assessment summary sheet checklists** – which set out the assessment process that is followed by WaterNSW and NRAR when determining whether to grant or decline an application.

The Commission found that both the Licensing Procedure Manual and the assessment summary sheet checklists sufficiently align with the relevant provisions of the legislative requirements set out above. While there were some gaps identified in the assessment summary sheet checklists, these gaps were considered immaterial.

The Commission considers that there were adequate systems, processes and procedures in place to support the implementation of Plan provisions relating to granting access licences within the audit period.

9.3 Rules for granting access licences were partially implemented

To assess if plan provisions were given effect, the Commission assessed a sample of water access licences processed under the plans during the audit period as well as a sample of notifications for those former entitlements converted to supply work approvals under the Act during the audit period. Note that new WALs were applied for and granted in the audit period for the Clarence and Macleay plans only and these five WALs were zero-share WALs.

The Commission found that water access licence application and granting processes were generally compliant with the legislative requirements set out above. In relation to notification requirements for mandatory conditions the Commission found that:

- water access licences applied for and granted in the audit period were fully compliant
- notification was delayed for pre-existing rights (former entitlements) granted either under a pre-existing plan or under the *Water Act 1912* by 20 to 21 months.⁵⁸

Some water sources within three of the plans (Clarence, the Macleay and the Tuross) were included in a pre-existing plan made in 2004. Pre-existing WALs in these water sources may have been notified of relevant mandatory conditions under these pre-existing plans.⁵⁹

⁵⁷ Land Registry Services (n.d.) *Water Access Licence Register*. Available at: <https://www.nswlrs.com.au/Public-Register/WAL-Register>.

⁵⁸ Notification was provided in March 2018 for the Brunswick, Clyde, Clarence, Tuross, Macleay and Deua Water Sharing Plans. Notification was provided in February 2018 for the Nambucca and Snowy Genoa Water Sharing Plans.

⁵⁹ The Commission has not viewed these earlier mandatory condition notifications made at the commencement of the 2004 plans.

Bulk commencement notices were issued to all holders of pre-existing rights in February and March 2018,⁶⁰ 20 to 21 months after plan commencement. This delayed the implementation of the notification requirements to give effect to Section 66(1A) of the Act:

- under sections 67(4) and 67(5) of the Act for pre-existing rights under pre-existing plans made under the Act.
- under Schedule 10 clauses 20(1) and 20(2) under the Act for pre-existing rights under the *Water Act 1912*.

9.4 Potential impacts

The plans are primarily implemented through water users complying with mandatory conditions. Without notification of mandatory conditions, the plans cannot be given effect.

When water access licence holders operate without conditions, they are not obligated to comply with the plans. For the first 20 to 21 months of operation of these plans in the absence of mandatory conditions on water access licences, NRAR (and its predecessors) could not have undertaken enforcement activity should there have been instances of non-compliance.

9.5 Recommendations and suggested actions

To assess risks around timeliness of notification under remakes going forward, the Commission considered the process for remaking plans by sampling a bulk notification for a recently made plan (the Namoi Alluvial Groundwater Sources 2020). The Commission has confidence in the broader process going forward and therefore makes no recommendations and raises no suggested actions.

⁶⁰ Notification was provided in March 2018 for the Brunswick, Clyde, Clarence, Tuross, Macleay and Deua Water Sharing Plans. Notification was provided in February 2018 for the Nambucca and Snowy Genoa Water Sharing Plans.

10 Criterion 6 – Managing access licences

10.1 Criterion overview

Section 85 of the Act provides for the keeping of water allocation accounts for access licences. Clause 17 of the Regulation sets out requirements in relation to debiting water allocations for WALs and carry over of water allocations to the next water year. Part 8 of the plans set out rules for the taking of water under an access licence with a share component that specifies one of these water sources.

10.2 Current roles, systems and processes

A summary of agency roles is as follows:

DPIE-Water is responsible for:

- setting standards and outputs (including policies) for water take measurement that are implemented by WaterNSW.
- determining water allocation through AWDs each year, which inform licensed water users how much water they can extract (see **Chapter 8 - Criterion 4 - Available water determinations**).

WaterNSW is responsible for administering water allocation accounts including the:

- development of database configuration rules for accounts
- implementation of WAL account management rules.

WaterNSW's Operating Licence operationalises the requirements set out in the Act and the Regulation through the following clauses:⁶¹

- Clause 6.2 of the Operating Licence requires WaterNSW to '*maintain a Water Allocation Account for each Customer that holds a Water Licence*'
- Clause 6.3.1 of the Operating Licence requires WaterNSW to '*determine the volume of water Extracted by, or Supplied to, each of its Customers, at least annually, for the purpose of accurate account management, billing and reporting*'.

The main systems used to manage access licence accounts are the:

- **WAS** – operated and maintained by WaterNSW, this is used to apply water allocation account management rules to individual WAL accounts
- **iWAS** – this is a customer portal to the WAS, which allows customers to voluntarily report water take.⁶²

⁶¹ State of NSW (n.d.) *WaterNSW Operating Licence 2017-2022*. Available at: https://www.waternsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf

⁶² WaterNSW (n.d.) *Internet Water Accounting System (iWAS)*. Available at: <https://www.waternsw.com.au/customer-service/ordering-trading-and-pricing/ordering/iwas>.

The main procedural and process document used by WaterNSW to support management of access licences is:

- **Water Accounting Rules for Water Sharing Plans procedure** – this sets out the process for administering all the account management rules in accordance with a water sharing plan
- **Determining Water Take procedure** – this sets out the process used by customer field officers when determining customers' water take.

The Commission considers there are opportunities to improve systems, processes and procedures to manage access licences. These are outlined in **Chapter 10.6**.

10.3 Account management provisions were partially implemented

The Commission found that the WAS has the functionality to manage the water allocation for access licences as required under the Act, Regulation and provisions within the plans. However, the WAS isn't being used to its full capacity to comply with these requirements.

The WAS is generally configured accurately to reflect plan rules (except for carryover limits), except that water take rules are not being implemented

To assess if plan provisions were given effect, the Commission examined configuration rules in the WAS for a sample of water sources in the plans. In general, account rules were found to have been configured to reflect unique plan provisions. Carryover limits have not been configured in all water sources. The materiality of this is low for the audit period, given the ability of users and authorities to measure and manage take without metering or reporting requirements in place is low. The materiality of not configuring the rules into accounts will increase as the *NSW Non-Urban Water Metering Policy begins to apply to these water sources from 2023* (see **Chapter 10.5**).

Even though the WAS has the functionality to include the water take measurements, it has not been implemented for these coastal groundwater systems in the audit period. The key provision in Part 8 of each plan, which states that '*water take...must not exceed a volume equal to...*', is not being accurately calculated as required by the Act⁶³ and the Regulation.⁶⁴

In relation to the amount of water carried over into the next water year, carryover limits have been configured in the WAS to reflect unique plan provisions. Where data is reported, carryover calculations reflected this data. However, carryover amounts for individual accounts where no data was reported, assumed the water take was zero and the maximum carryover limit was applied to those accounts.

WaterNSW has encouraged customers to voluntarily report usage over the last three years through its iWAS system. WaterNSW staff indicated that a financial incentive is in place for customers who provide usage or meter read to WaterNSW. Even if customers have zero usage, they receive a 'two-part tariff' if they report and only pay for what they have used, plus their fixed charges. Customers who do not provide usage or a meter read only receive a 'one-part tariff' and pay for their full entitlement in usage as well as their fixed fees (one-part tariff).

This is only a voluntary process, where customers are invited to provide this information based on the logbooks they maintain. It doesn't necessarily provide WaterNSW with comprehensive

⁶³ Section 85 of the Act.

⁶⁴ Clause 17 of the Regulation.

information, which would enable them to comply with the access licence account management rules in Part 8 or 9 (as relevant) of the plans.

Based on internal documents provided to the audit from WaterNSW, the rate of customer reporting is currently low, with less than 10 percent of WAL holders reporting across accounts in the water sources subject to sample testing. This may be because:

- the financial incentive may not always be enough to incentivise all customers to report or there may not be awareness of the incentive across the customer base⁶⁵
- licence holders were not required to record data in the South Coast Plan and in the North Coast Plan until February 2018 and are still not required to record usage in the North Coast Fractured and Porous Rock Plan (see **Chapter 13 - Criterion 5 - Granting Access Licences**).

Despite having a procedure to determine water take, WaterNSW indicated that it currently does not have any designated staff in the coastal area for unregulated and alluvial water sources as most of the customer field officers are designated to the regulated river and inland groundwater systems. Even if there were enough field officers allocated to these water sources, the current limited metering coverage would not provide adequate data to support the water accounting requirements.

10.4 Potential impacts

Potential impacts of not accurately managing the WALs in accordance with the rules set out in the plans include:

- an inability to provide transparency that the WAL accounts are managed in accordance with the rules established for each water source within the plans
- an inability to accurately account for the water allocation for each licence
- potentially over charging customers for water that has not been accessed or extracted by them
- insufficient information to provide insight into potential changes that need to be made for these water sources (based on actual use)
- insufficient information to inform compliance and enforcement activities
- insufficient information to inform take overall and determine whether this sits within the LTAAELs or not.

⁶⁵ WaterNSW (n.d.) *Groundwater Billing Calculator*. Available at: <https://www.waternsw.com.au/customer-service/ordering-trading-and-pricing/billing-calculators/groundwater-bill-calculator>

10.5 DPIE-Water is improving water take information availability

From 1 December 2023 the NSW *Non-Urban Water Metering Policy* will require surface and alluvial groundwater works that take or may be used to take water to be metered. Exemptions exist, generally these are for surface water pumps below 100 millimetres and for groundwater bores less than 200 millimetres, for various circumstances for multiple works and for basic landholder rights.^{66,67,6869}

The *NSW Non-Urban Water Metering Policy* includes improved requirements for reporting and recording.

This will improve information availability in the plans significantly. Although given a large component of this information will be voluntarily reported, the accuracy of the information is unknown. If accurate water use data were available, WaterNSW could more accurately determine water take and manage accounts.

10.6 Recommendations and suggested actions

The Commission makes two recommendations and raises one suggested action to improve account management and management of extraction across these water sources.

The recommendation refers to “data” which could be information that is cost effectively gathered as appropriate according to nature and scale of usage and risk of take in the context of each water source. There are a number of ways to improve availability of data. This could include for example metering, voluntary reporting of logbook information and estimation of take through electricity usage associated with pump use. The *NSW Non-Urban Water Metering Policy* will formalise some of these requirements in 2023.

R 6.1	WaterNSW to obtain reliable extraction data for all individual water access licences in these coastal groundwater systems and use it to ensure maximum allowable take is not exceeded as set out under Part 8 or 9 (as relevant) of these coastal unregulated and alluvial plans.
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It is not clear whether the database configuration rules developed by WaterNSW were reviewed by DPIE-Water at plan commencement in 2016 to ensure they reflect the account management dealings rules.

⁶⁶ DPIE (2020) *NSW Non-Urban Water Metering Policy*, pp. 20-21. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/312335/nsw-non-urban-water-metering-policy.pdf.

⁶⁷ The following authority holders are exempt from metering, but will still be required to report their take annually: works used for basic landholder rights only; water use from single bores with a diameter less than 200 millimetres; multiple bores on the same licence of: no more than two bores, each of which has a diameter less than 160 millimetres, no more than three bores, each of which has a diameter less than 130 millimetres, no more than four bores, each of which has a diameter less than 120 millimetres.

⁶⁸ The following authority holders are exempt from metering, but will still be required to report their take annually: Surface water pumps where there are: no more than 2 pumps, each of which is less than 75 mm or no more than 3 pumps, each of which is less than 50 mm, or no more than 4 pumps, each of which is less than 40 mm.

⁶⁹ DPIE (2020) *NSW Non-Urban Water Metering Policy*, p.4. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/312335/nsw-non-urban-water-metering-policy.pdf.

The Commission understands that DPIE-Water do participate in the development and review of these rules informally. There is not a current formal process for DPIE-Water to check the WAS database configuration rules prior to implementation. The Commission considers that DPIE-Water should be a part of this process to ensure rules are adequately coded into the WAS to support account management and management of dealings.

This issue was a suggested action in the Commission's coastal groundwater audit report and is relevant to these water sources.

The materiality of the missing carryover rules is not high given the ability of users and authorities to measure and manage take without metering or reporting requirements in place is low. Going forward as metering, recording and reporting requirements become greater (from 2023), timely configuration of plan rules will become more important in these water sources.

R 6.2	WaterNSW to complete account configuration for water sources in these coastal unregulated and alluvial plans.
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WaterNSW indicated that currently configuring plan rules is timely and complex, this could potentially be simplified through working with DPIE-Water planning staff at plan commencement.

SA 6	DPIE-Water to develop a process to ensure its role in the configuration of rules into the Water Accounting System is clear and understood by all parties involved in this process and that the configuration process for WaterNSW is simplified to enable timely configuration of plan rules.
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11 Criterion 7 – Rules for water supply work approvals

11.1 Criterion overview

Part 9 or Part 10 (as relevant)⁷⁰ of each plan sets out the rules for water supply work approvals in accordance with the Act and the Regulation. Provisions in the Act establish rules for water supply work approvals:

- Section 92 (applications for approvals)
- Section 93 (objections to applications)
- Section 95 (determinations of applications)
- Section 96 and 97 (matters for consideration in relation to granting approvals)
- Section 98 (notification of approval holders)
- Section 100 (imposing mandatory and discretionary conditions on approvals)
 - Section 100(1A) which states that mandatory conditions do not have effect in relation to an approval unless they are included in the terms of the approval.

Provisions in the Act also establish rules for the conversion of former entitlements:

- Schedule 10, Clause 20(1) requiring notification of the terms and Clause 20(2) requiring inclusion of mandatory conditions in the terms) relating to former entitlements granted under the Water Act 1912.
- Sections 102(4) and 102(5) of the Act, require notification of revised conditions for approvals granted under previous plans made under the Act.

The relevant clauses of the Regulation include:

- Clause 25(1)(a), which requires the application to be in approved form
- Clause 25(1)(b), which requires an application to include or to be accompanied by an assessment of the likely impact of the water use, water or activity concerned (if required by the Minister)
- Clause 26(7), which requires the application for approval to be published.

11.2 Current roles, systems and processes

WaterNSW, NRAR and DPIE-Water administer the Act, the Regulation and individual plan rules for the plans related to the granting or amending of water supply work approvals.

Roles and responsibilities for giving effect to plan provisions have been documented broadly for the public on the WaterNSW and NRAR websites.^{71,72}

⁷⁰ Part 9 relates to Brunswick, Clarence, Clyde, Deua, Snowy Genoa and Nambucca plans. Part 10 relates to Macleay and Tuross plans.

⁷¹ NSW Government (2018) *Roles of water management agencies in NSW*. Available at: https://www.waternsw.com.au/__data/assets/pdf_file/0020/133940/Water-Roles-and-Responsibilities.pdf.

⁷² NRAR (n.d.) *Licensing and approvals*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/licensing-and-approvals>.

In addition, the WaterNSW Operating Licence and other internal documents outline various functions, including the Deed of Business Transfer between WaterNSW and the former DPIE-Water and delegations. In addition, audit interviews indicate that roles in relation to approvals are well understood between the two organisations. Any gaps in documentation or understanding are considered immaterial.

There have been several restructures impacting agency roles and names since 2015. Prior to 2015, the NSW Office of Water held the broad assessment role for water supply approvals. This changed to the Department of Primary Industries – Water (DPI-Water) in 2015/16. From July 2016, this role transferred to WaterNSW. From April 2018, NRAR commenced their role for approvals assessments and compliance and enforcement, taking the responsibility for granting approvals for a subset of customers.

A summary of agency roles is as follows:

- **WaterNSW** is responsible for assessing and granting water supply work approvals to landholders, industries and developments that are not State significant development or State significant infrastructure.⁷³ WaterNSW is also responsible for notification of all holders of former entitlements under the *Water Act 1912* upon the commencement of a new water sharing plan under the Act.
- **NRAR** is responsible for assessing and granting water supply work approvals to government agencies, including other NSW Government agencies, local councils and the Australian Government; state-owned corporations; major water utilities, water supply authorities, and local water utilities; licensed network operators under the *Water Industry Competition Act 2006*; mining companies; irrigation corporations; Aboriginal communities and businesses; floodplain harvesting; major developments (State significant developments and State significant infrastructure); schools and hospitals. NRAR also has a role to monitor and audit compliance with approvals, specifically detecting instances of non-compliance in a timely manner.⁷⁴
- **DPIE-Water** prepares resource assessments (hydrogeological assessments) for groundwater WAL applications, water supply work approvals and dealings. These hydrogeologic assessments involve the analysis of expected drawdown impacts compared to the acceptable levels of impact specified for each groundwater source. These are provided to WaterNSW or NRAR as an input into the approvals' assessment process.⁷⁵

The main systems used to grant access licences are the:

- **WLS - Approvals Transaction Module** – this is an automated workflow and storage system. It captures all applications, including water supply work approvals and supports the assessment officers to undertake the assessments of the application in line with the requirements.

⁷³ State of NSW (n.d.) *WaterNSW Operating Licence 2017-2022*, pp 50-51. Available at: https://www.waternsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf, NRAR Act 2017 cl. 11 Functions of the Regulator and Schedule 2 Additional functions of the Regulator.

⁷⁴ NRAR (n.d.) *Licensing and approvals*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/licensing-and-approvals>.

⁷⁵ Department of Industry (2018) *Water Resource Fact Sheet – Assessing Groundwater Applications*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0008/175931/Assessing-groundwater-applications-fact-sheet.pdf.

- **NSW Water Register** – this is set up under Section 113 of the Act, which requires the register to be available for public inspection and record every application and every approval granted, extended, amended, transferred, surrendered, suspended or cancelled. The register can be found at the WaterNSW website.⁷⁶

The main procedural and process documents used by WaterNSW, NRAR and DPIE-Water to support the granting of access licences are:

- **The Licensing Procedure Manual – Operations Section** – which sets out requirements for operationalising the Act and Regulation requirements for the water supply works approval process.
- **Assessment summary report** – this provides a framework for officers to document their application assessment and decision, designed to ensure the relevant administrative and environmental checks stated in the Act and Regulation are undertaken by the assessing officer and includes space to capture the relevant signatures.
- **Approval assessment checklist** – this is a checklist for use by the officer to ensure they have undertaken the required processes (administrative and environmental checks and impact assessment of the activity) under the Licensing Procedure Manual, the Act and the Regulation.
- **Groundwater Assessment Guidelines, Water Supply Works and Dealings Applications** – except for the references to agencies that no longer exist, this is a contemporary document that provides detailed and comprehensive guidance to DPIE-Water officers in relation to hydrogeologist reports which are conducted when required as part of the water supply work approval process.

The Commission considers there were adequate systems, processes, procedures in place to support implementation of plan provisions relating to water supply work approvals within the audit period.

11.3 Rules for water supply work approvals were partially implemented

To assess if plan provisions were given effect, the Commission assessed a sample of supply work approvals processed under the plans during the audit period as well as a sample of notifications for those former entitlements converted to supply work approvals under the Act during the audit period.

The Commission found that water supply work approvals application and granting processes were generally compliant with the legislative requirements set out above. In relation to notification requirements for mandatory conditions the Commission found that:

- water supply approvals applied for and granted in the audit period were fully compliant
- notification was delayed for pre-existing rights (former entitlements) granted either under a pre-existing plan or under the *Water Act 1912* by 20 to 21 months.⁷⁷

⁷⁶ WaterNSW (n.d) *NSW Water Register*. Available at: <https://waterregister.waternsw.com.au/water-register-frame>.

⁷⁷ Notification was provided in March 2018 for the Brunswick, Clyde, Clarence, Tuross, Macleay and Deua Water Sharing Plans. Notification was provided in February 2018 for the Nambucca and Snowy Genoa Water Sharing Plans.

For some water sources within three of the plans (Clarence, the Macleay and the Tuross) were included in a pre-existing plan made in 2004. Pre-existing water supply work approvals in these water sources may have been notified of relevant mandatory conditions under these pre-existing plans.⁷⁸

Bulk commencement notices were issued to all holders of pre-existing rights in February and March 2018,⁷⁹ 20 to 21 months after plan commencement. This delayed the implementation of the notification requirements to give effect to Section 100(1A) of the Act:

- under sections 102(4) and 102(5) of the Act for pre-existing rights under pre-existing plans made under the Act.
- under Schedule 10 clauses 20(1) and 20(2) under the Act for pre-existing rights under the *Water Act 1912*.

11.4 Potential impacts

The plans are primarily implemented through water users complying with mandatory conditions. Without notification of mandatory conditions, the plans cannot be given effect.

When water supply work approval holders operate without conditions, they are not obligated to comply with the plans. For the first 20 to 21 months of operation of these plans in the absence of mandatory conditions on water supply work approvals, NRAR (and its predecessors) could not have undertaken enforcement activity should there have been instances of non-compliance.

11.5 Recommendations and suggested actions

To assess risks around timeliness of notification under remakes going forward, the Commission considered the process for remaking plans by sampling a bulk notification for a recently made plan (the Namoi Alluvial Groundwater Sources 2020). The Commission has confidence in the broader process going forward and therefore makes no recommendations or suggested actions.

⁷⁸ The Commission has not viewed these earlier mandatory condition notifications made at the commencement of the 2004 plans.

⁷⁹ Notification was provided in March 2018 for the Brunswick, Clyde, Clarence, Tuross, Macleay and Deua Water Sharing Plans. Notification was provided in February 2018 for the Nambucca and Snowy Genoa plans.

12 Criterion 8 – Access licence dealing rules

12.1 Criterion overview

The rules and requirements applicable to WAL dealings are set out in:

- the Act, primarily Division 4, sub-sections 71L-71Z
- parts 2 and 3 of the *Access Licence Dealing Principles Order 2004*⁸⁰
- clauses 12 and 22 of the Regulation
- Part 10⁸¹ or Part 11⁸² (as relevant) of the plans.

The Act sets out the types of dealings that may occur, including:

- transfer of WALs (Section 71M) – *these dealings are out of the scope of the audit*
- term transfers of entitlements under WALs (Section 71N)
- conversion of access licence to new category (Section 71O) – *no dealings of this type have occurred as they are dependent on conversion factors, which have not yet been developed*
- subdivision and consolidation of WALs (Section 71P)
- assignment of rights under WALs (Section 71Q)
- assignment of individual daily extraction component (Section 71QA)
- amendment of share component of WAL (Section 71R)
- amendment of extraction component of WAL (Section 71S) – *WaterNSW advised that no dealings of this type were undertaken in these plans, as it is dependent on the amendment of extraction component which has not yet been developed*
- assignment of water allocations between access licences (Section 71T)
- interstate transfer of WALs (Section 71U) – *no dealings of this type have occurred as they are dependent on conversion factors, which have not yet been developed*
- interstate assignment of water allocations (Section 71V) – *no dealings of this type have occurred as they are dependent on conversion factors, which have not yet been developed*
- WAL may nominate water supply and extraction points (Section 71W).

12.2 Current roles, systems and processes

A summary of agency roles is as follows:

- **WaterNSW** – since July 2016, responsible for administering dealings in accordance with the WaterNSW Operating Licence. Specifically processing dealings under sections 71O, 71P, 71Q, 71QA, 71R, 71S, 71T, 71U, 71V and 71W of the Act.⁸³

⁸⁰ NSW Government (2004) *Access Licence Dealing Principles Order 2004*. Available at: <https://www.legislation.nsw.gov.au/view/whole/html/inforce/current/sl-2004-0433>.

⁸¹ Part 10 relates to Brunswick, Clarence, Clyde, Deua, Snowy Genoa and Nambucca plans

⁸² Part 11 relates to the Macleay and Tuross plans

⁸³ State of NSW (n.d.) *Water NSW Operating Licence 2017-2020*, p. 4. Available at: https://www.waternsw.com.au/_data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf.

- **Land Registry Services** – responsible for maintaining the WAL Register on behalf of the Minister administering the Act;^{84, 85, 86} registering general WAL dealings on the WAL Register (WAL dealings only take effect when registered);⁸⁷ printing and issuing WAL certificates;⁸⁸ processing Section 71M and Section 71N dealings.

Land Registry Services staff indicated that once the dealing is approved, WaterNSW provide the applicant with a notification dealing form for lodgement with Land Registry Services (pre-populated by WaterNSW) and supply notification and instructions to Land Registry Services on how to register the dealing. The applicant completes the form (and includes the lodging party details), submits to Land Registry Services with the required payment. Land Registry Services receives a separate instruction from WaterNSW with similar information. Land Registry Services only register the dealing on the WAL when information is revived from both WaterNSW and the applicant.⁸⁹
- **DPIE-Water** – since July 2016, provide hydrogeological advice as required. Prior to this, this role was undertaken by predecessor agencies, including the NSW Office of Water and DPI.

The following systems are used to administer dealings:

- **WLS** – WaterNSW uses the WLS to process dealings under sections 71O, 71P, 71Q, 71QA, 71R, 71S, 71U and 71W of the Act. The WLS has varied levels of access and functionality for officers. Review processes are in place for WAL dealings by the water regulation officer and the determining officer before the dealing is sent to Land Registry Services for processing.
- **WAS** – WaterNSW uses the WAS to process dealings (temporary allocation assignments) under sections 71T and 71V of the Act.⁹⁰ The WAS is coded with specific plan rules, water source and category of licence, which are automatically assigned to the WAL. The WAS can be coded so that dealings prohibited under plan rules cannot occur. Access and functionality to process allocation assignments in the WAS is restricted to authorised officers (customer service officer levels 1 and 2).
- **NSW Water Register** – WaterNSW includes some dealings information in the register but it uses terminology from the *Water Act 1912*, which is not consistent with the terminology used in the Act. Despite this, the information currently in the register does add an element of transparency in relation to dealings under sections 71P, 71Q, 71R and 71T of the Act.
- **WAL Register** – Land Registry Services uses the WAL Register to register all dealings.

⁸⁴ Land Registry Services (n.d.) *Water Access Licence Register*. Available at: <https://www.nswlrs.com.au/Public-Register/WAL-Register>.

⁸⁵ In July 2004, the Department of Infrastructure, Planning and Natural Resources delegated the function to maintain the WAL register to Department of Lands – Lands and Property Information Division. (Department of Lands – Lands and Property Information Division (2004) *Circular - Commencement of Water Access Licence Register*. Available at: <https://nswlrs.com.au/getattachment/5f918b7d-ea44-4cb7-8172-75e24e71f213/attachment.aspx>.

⁸⁶ Division 3A of the Act states what must be recorded in the WAL Register, including dealings and other matters.

⁸⁷ WaterNSW (n.d.) *Dealings and Trade*. Available at: <https://www.waternsw.com.au/customer-service/water-licensing/dealings-and-trade>.

⁸⁸ Land Registry Services (n.d.) *Water Access Licence Register*. Available at: <https://www.nswlrs.com.au/Public-Register/WAL-Register>.

⁸⁹ Land Registry Services (n.d.) *Water Access Licence Register*. Available at: <https://www.nswlrs.com.au/Public-Register/WAL-Register>.

⁹⁰ WaterNSW (n.d.) *Water Accounting System*. Available at: <https://www.waternsw.com.au/customer-service/ordering-trading-and-pricing/ordering/> WAS.

The following procedural and process documents are used by WaterNSW, Land Registry Services and DPIE-Water to support the administration of dealings:

- **Licensing Procedure Manual – Operations section: Water access licence dealings** provides the process used for processing applications of dealing used by WaterNSW. WaterNSW documents the dealing allocation and processing process on its website.⁹¹ The webpage provides information and downloadable documents for the applicant's information and use, such as pre-application searches, submitting applications, how the application is processed, registration of WAL dealings and registration of water allocation assignments.
- **Assessment summary sheet checklists** – used by WaterNSW to document assessment of dealings applications.
- **Water accounting rules** – these set out the detailed process and the accounting rules for the accounting requirement of the plans and how the accounting rules are applied in the WAS. This document is used to manage the water ordering, water usage and licence dealings under the Act. Individual plan provisions are coded into the WAS by WaterNSW.
- **Registrar General's Guidelines – Water dealings** – these are used by Land Registry Services and outline when sections 71M and 71N transfers can take place and sets out the requirements for applicants lodging dealings with Land Registry Services. It documents high-level procedures for staff in processing dealings, including for correspondence and delivery, evidence, lost documents, minute papers, production of documents, rejection of WAL dealings and requisitions. The guidelines also outline the process to be used by Land Registry Services staff when processing, entering and recording transfers on the WAL Register.

The Commission considers there were adequate systems, processes, procedures in place to support implementation of plan provisions relating to water supply work approvals within the audit period.

12.3 Rules for access licence dealing rules were implemented

The relevant responsible parties implemented plan provisions relating to access licence dealing rules set out in Part 10 of the plans within the audit period.

To assess if plan dealing rules were given effect, the Commission assessed a sample of dealings, WALs and associated notifications from the NSW Water Register that occurred under the plans during the audit period.

Overall, the Commission found no gaps to legislative requirements set out above in the dealings that were sampled across the plans. Specific plan activity related to access licence dealings rules is summarised in

⁹¹ WaterNSW (n.d) *Water Dealings and Trade – dealings process*. Available at: <https://www.waternsw.com.au/customer-service/water-licensing/dealings-and-trade/dealings-process>.

Table 4.

Table 4: Summary of plan activity related to access licence dealing rules

Plan	Findings
Brunswick	Prohibited dealings types under sections 71U and 71V of the Act did not occur during the audit period, in accordance with Part 10, Clause 63 of the plan.
	Nomination of water supply works and extraction points dealings under Section 71R of the Act were processed in accordance with Part 10, Clause 61 of the plan.
	Nomination of water supply works dealings under Section 71W were processed in accordance with Part 10, Clause 64 of the plan.
	No dealings occurred under sections 71N, 71O, 71P, 71Q, 71QA, 71S, and 71T of the Act during the audit period, so could not be tested.
	Assignment of rights dealings under Section 71Q of the Act were processed in accordance with Part 10, Clause 60 of the plan.
Clarence	Assignment of water allocations dealings under Section 71T of the Act occurred in accordance with Part 10, Clause 62 of the plan.
	Nomination of water supply works dealings under Section 71W were processed in accordance with Part 10, Clause 64 of the plan.
	Prohibited dealings types under sections 71U and 71V of the Act did not occur during the audit period, in accordance with Part 10, Clause 63 of the plan.
	No dealings occurred under sections 71N, 71O, 71P, 71QA, 71R, and 71S of the Act during the audit period, so could not be tested.
	Prohibited dealings types under sections 71U and 71V of the Act did not occur during the audit period, in accordance with Part 10, Clause 59 of the plan.
Clyde	No dealings occurred under sections 71N, 71O, 71P, 71Q, 71QA, 71R, 71S, 71T and 71W of the Act during the audit period, so could not be tested
	Prohibited dealings types under sections 71U and 71V of the Act did not occur during the audit period, in accordance with Part 10, Clause 60 of the plan.
Deua	No dealings occurred under sections 71N, 71O, 71P, 71Q, 71QA, 71R, 71S, 71T and 71W of the Act during the audit period, so could not be tested.
	Assignment of rights dealings under Section 71Q of the Act were processed in accordance with Part 10, Clause 63 of the plan.
	Consolidation of access licences dealings under Section 71P were processed in accordance with Part 11 of the plan.
Macleay	Nomination of water supply works dealings under Section 71W were processed in accordance with Part 11, Clause 68 of the plan.
	Prohibited dealings types under sections 71U and 71V of the Act did not occur during the audit period, in accordance with Part 11, Clause 67 of the plan.

	No dealings occurred under sections 71N, 71O, 71QA, 71R, 71S and 71T of the Act during the audit period, so could not be tested.
Nambucca	Prohibited dealings types under sections 71U and 71V of the Act did not occur during the audit period, in accordance with Part 10, Clause 62 of the plan.
	No dealings occurred under sections 71N, 71O, 71P, 71Q, 71QA, 71R, 71S, 71T and 71W of the Act during the audit period, so could not be tested.
Tuross	Prohibited dealings types under sections 71U and 71V of the Act did not occur during the audit period, in accordance with Part 11, Clause 60 of the plan.
	No dealings occurred under sections 71N, 71O, 71P, 71Q, 71QA, 71R, 71S, 71T and 71W of the Act during the audit period, so could not be tested.
Snowy Genoa	No dealings occurred under sections 71N, 71O, 71P, 71Q, 71QA, 71R, 71S, 71T , 71U, 71V and 71W of the Act during the audit period, so could not be tested.

12.4 Recommendation and suggested actions

The Commission found that implementation of Plan provisions relating to implementing dealings met criteria and makes no recommendations and raises one suggested action.

One suggested action is raised:

- The NSW Water Register contains dealing related information that is incomplete and uses old terminology. WaterNSW is not required to maintain and update the NSW Water Register with respect to dealings information.⁵² However, dealings information is currently included on the NSW Water Register in relation to dealings under sections 71P, 71Q, 71R and section 71T of the Act. The register is incomplete as it does not include active dealings under sections 71M, 71N and 71W of the Act. It is not expected that dealings under sections 71M and 71N of the Act would be included, as these are processed by Land Registry Services. In addition, the register uses old terminology from the *Water Act 1912* (for example, dealings under Section 71T of the Act are referred to as ‘temporary trades’). For improved transparency for the public, more comprehensive information across all dealings on the register would be beneficial.

SA 8	WaterNSW to increase the accuracy and extent of the dealings related information available on the NSW Water Register for improved transparency.
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13 Criterion 9 – Mandatory conditions

13.1 Criterion overview

To be given effect, mandatory conditions rely on:

- adequate registering of WALs and notifying landholders of mandatory conditions
- mandatory conditions reflecting the correct provisions in the plan on a licence or water supply work approval (approval)
- a compliance and enforcement regime promoting compliance by approval and WAL holders with the obligations set out in the conditions on the approvals and WALs.

In relation to the first dot point above, registering WALs and notifying landholders of mandatory conditions were considered critical components of previously assessed criterion and issues around these provisions are discussed in **Chapter 9** (Criterion 5 - Granting access licences) and **Chapter 11** (Criterion 7 – Rules for water supply work approvals). The assessment of Criterion 5 and Criterion 7 found that notification of mandatory conditions for holders of pre-existing rights had been delayed in all plans, meaning the provisions were given delayed effect.

Recognising that mandatory conditions were delayed in being given effect, this chapter focusses on the second two dot points above: the accuracy of the mandatory conditions themselves in reflecting plan provisions, as well as the enforcement regime.

Part 11 and Part 12⁹² (as relevant) of the plans set out provisions describing the mandatory conditions that WALs and water supply work approvals must include (where required).

Mandatory conditions for WALs (Division 2 of relevant Part) generally relate to account management such as carryover entitlements, rules relating to access of water, notification of breaches, and keeping of logbooks.

Mandatory conditions for water supply work approvals (Division 3 of relevant Part) generally relate to rules for appropriate installation of water supply works.

Enforcement requirements are set out in the Act, specifically:

- Part 2 Division 1A, sections 61A to 60I (Offences relating to WALs)
- Part 3 Division 1A, sections 91A to 91N (Offences relating to water supply work approvals)⁹³
- Section 78 (WAL suspension)
- Chapter 7 (enforcement for example stop work orders, removal of unlawful water management works).

⁹² Part 12 relates to the Macleay and Tuross plans.

⁹³ Note that offences under sections 91B, 91C, 91C, 91D and 91E of the Act are not relevant to the plans.

13.2 Current roles, systems and processes

A summary of agency roles is as follows:

- **DPIE-Water** – currently responsible for creating, entering and coding the mandatory conditions into the WLS (since September 2019). Prior to this, the function was at various times carried out by NRAR and DPIE-Water predecessor organisations (DPI-Water, Department of Industry – Lands and Water and Department of Industry – Water).
- **WaterNSW** – responsible for imposing mandatory conditions on a WAL and approval holders in accordance with sections 66⁹⁴ and 100⁹⁵ of the Act for its customers.⁹⁶ Also currently responsible for notifying licence and approval holders upon the commencement of a new plan under the Act, conversions of rights under Schedule 10, or changes to or remakes of water sharing plans under the Act. Prior to this, this was the responsibility of DPIE-Water predecessors or NRAR.
- **NRAR** – currently responsible for enforcement of WALs and water supply work approvals that give effect to plan provisions through their mandatory conditions. NRAR took over these responsibilities in April 2018, prior to this, DPI-Water and WaterNSW were responsible. Regardless of compliance behaviours, in a particular plan area, it has been recognised as important to have adequate enforcement capabilities and arrangements in place by the NSW Ombudsman (2018). The *Natural Resources Access Regulator Act 2017* objects are to: *10(a) to ensure effective, efficient, transparent and accountable compliance and enforcement measures for the natural resources management legislation, and 10(b) to maintain public confidence in the enforcement of the natural resources management legislation.*
- **Land Registry Services** – maintains the WAL register under Section 71 of the Act, which provides an online record of every water access licence in NSW and its associated dealings including the activation of any water supply work approval under a specific WAL. This gives effect to WALs and water supply works approvals, a pre-requisite for mandatory conditions to be assigned and given effect.

The following systems are used to administer mandatory conditions:

- **WLS** – used by WaterNSW and NRAR to apply mandatory conditions to WALs and water supply work approvals. It generates the statement of approval, statement of conditions, the notice of decision and the cover letter that are sent to the licence and approval holders. These documents include the relevant mandatory conditions.
- **NSW Water Register** – operated by WaterNSW, this system makes WALs and work approvals available to the public including their respective mandatory conditions.
- **WAL Register** – registers the WALs and related dealings under Section 71 of the Act, operated by Land Registry Services.

⁹⁴ State of NSW (n.d.) *WaterNSW Operating Licence*. 2017-2022, p. 41. Available at: https://www.waternsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf.

⁹⁵ *Ibid*, p. 53.

⁹⁶ NRAR (n.d.) *Licensing and approvals*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/licensing-and-approvals/licensing-and-approvals> states that NRAR is responsible for granting approvals to government agencies, including other NSW government agencies, local councils and the Commonwealth; state owned corporations; major water utilities, water supply authorities, and local water utilities; licensed network operators under the *Water Industry Competition Act 2006*; mining companies; irrigation corporations; Aboriginal communities and businesses; floodplain harvesting; major developments (state significant developments and state significant infrastructure); schools and hospitals; and that WaterNSW is responsible for granting approvals to rural; landholders; rural industries and developments which are not state significant development or state significant infrastructure.

- **Compliance Investigation Reporting and Management System (CIRaM)** – used by NRAR for compliance purposes.

The Licensing Procedure Manual is used to support implementation of mandatory conditions, including:

- **Chapter 8 Conditions**- this provides information in relation to translating provisions into mandatory conditions in WLS for use by approval officers in WaterNSW and NRAR.
- **Section 3.4.1** – relates to processing and assessing an application for a water supply work and states that WAL must include mandatory conditions which are those set by the Minister through the Act or relevant water sharing plans.
- **Section 1.5.2** – relates to issuing approvals and states that mandatory conditions will display on screen (in WLS) and be automatically added to the statement of approval based on the location and the rules within the relevant water sharing plan.

The Compliance Investigations Manual is used by NRAR to respond to compliance allegations. It is the primary reference for NRAR investigations staff and sets out the approved processes, procedures, authorities, instruction and guidance for investigating alleged breaches of water regulations. It is not clear what procedures were followed by agencies responsible for compliance before NRAR was established in April 2018.

The Commission considers there were adequate systems, processes, procedures in place to support implementation of plan provisions relating to water supply work approvals within the audit period.

13.3 Rules for mandatory conditions have been partially implemented

To assess if plan provisions were given effect, the Commission sampled a range of WALs and water supply work approvals of both pre-existing entitlements and those applied for and granted in the audit period. The analysis indicated that plan provisions were largely translated across to mandatory conditions in water supply work approvals and WALs accurately to give effect to requirements except for the gaps outlined below.

Mandatory conditions provisions were accurately translated to WALs except for the gaps outlined below

Mandatory conditions were accurately translated to WALs except for one exception:

- In the Macleay Plan, Mandatory conditions were not applied to give effect to Clause 47(12) in one of four WALs sampled. This should be reviewed across all applicable WALs and rectified. Licence holders should have the correct water take provisions on their licence to inform their compliance.

Mandatory conditions provisions were generally accurately translated to water supply work approvals except for the gaps outlined below.

Mandatory conditions were accurately translated to water supply work approvals except for:

- In the Brunswick Plan, the majority of water supply work approvals sampled did not include mandatory conditions to give effect to the requirements relating to decommissioning supply works.

- Discretionary conditions were applied to water supply work approvals where mandatory conditions should have been applied. These discretionary conditions related to giving effect the plan requirements relating to applying the bore guidelines during construction and sealing off the supply work from other water sources to avoid contamination (two new sampled water supply work approvals applied for and granted in the audit period in water sources in the Clarence and Macleay plans).

A proactive and reactive compliance and enforcement regime is in place

There is an enforcement regime in place to support implementation of the plans:

- Monitoring of offences under the Act (sections 91A-91N of the Act as applicable) and associated enforcement of mandatory conditions is being undertaken for approvals in accordance with sections 78 and 78A and Chapter 7 of the Act.
- Monitoring of offences under the Act (sections 60A-60I of the Act as applicable) and associated enforcement of mandatory conditions is being undertaken for WAL (extraction) in accordance with Chapter 7 of the Act.

In relation to compliance and enforcement, the *Natural Resources Access Regulator Act 2017* specifically provides that NRAR's priorities are to be set independently. These regulatory priorities are reviewed on a regular basis and published.⁹⁷ NRAR's priority projects for groundwater have been prioritised geographically in the Lower Murrumbidgee deep groundwater source, the Lower Lachlan and the Lower Namoi groundwater sources.⁹⁸

NRAR's strategic plans set out its regulatory commitments to improve its compliance, particularly in high risk areas. These are published as they are updated and available on the NRAR website. The current strategic plan is *Strategic Plan 2021-2023*.⁹⁹

Breaches in WAL or approvals mandatory conditions can be identified by NRAR across NSW through:

- proactive compliance, which may include monitoring, audit and priority projects
- reactive compliance, which includes following up reports from third parties made by phone, email or online forms.^{100, 101}

Prior to the establishment of NRAR, concerns around compliance resourcing and standards across NSW had been raised by the NSW Ombudsman.^{102, 103}

⁹⁷ NRAR (2019) *Natural Resource Access Regulator Regulatory Priorities 2019 – 2021*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0020/227324/NRARs-regulatory-priorities-2019-to-2021.pdf.

⁹⁸ *Ibid.*

⁹⁹ NRAR (2020) *NRAR Strategic Plan 2021-2023*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0005/335363/NRAR-Strategic-Plan-2021-23.pdf.

¹⁰⁰ DPIE (n.d.) *Report suspicious activity*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/report-suspicious-water-activities/report-suspicious-activity>.

¹⁰¹ NRAR (2019) *NRAR Regulatory Policy*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0003/144039/NRAR-Regulatory-policy.pdf

¹⁰² NSW Ombudsman (2017) *Investigation into water compliance and enforcement 2007-17*, pp. 14-24. Available at: https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0012/50133/Investigation-into-water-compliance-and-enforcement-2007-17.pdf.

¹⁰³ NSW Ombudsman (2018) *Water: Compliance and enforcement*. Available at: https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0006/57903/Water-compliance-and-enforcement-a-special-report.pdf.

Compliance activity across NSW has improved since NRAR's establishment in April 2018, driven by increased regulatory presence and staff, stronger action and ongoing commitment to training staff.^{104, 105} NRAR inherited 483 cases of alleged breaches from agencies previously responsible for enforcement. In just over a year, 407 of these cases had been resolved. Compared to 2017, there were 70 percent more cases being investigated and 80 percent more cases being finalised across NSW, noting that most of these efforts were in the Murray-Darling Basin.¹⁰⁶

Being coastal unregulated and alluvial plans, the plans have not been a regulatory priority, given the focus has been in the Murray-Darling Basin.

Despite this, some proactive theme- based compliance projects are currently taking place that include these plan areas.

Proactive compliance programs have occurred in Macleay, Nambucca, Brunswick and Clarence plan areas over the audit period. This has comprised of routine monitoring of expired approvals, compliance monitoring of cease to pump rules and local water authorities compliance audits. Note no findings were provided in relation to these routine monitoring activities.

The Clarence Plan area was also included in the "Coffs Harbour horticulture project", which included inspections of 21 properties in relation to compliance with water licence rules in the Clarence and North Coast Fractured and Porous Rock Groundwater plans. 18 properties were found to be non-compliant. This included properties with dams that exceeded their maximum harvestable right capacity between 1.5 and 12 times. Officers also found unauthorised pumps on a small water course. As a result of the campaign, 14 penalty notices, a stop-work order to immediately cease use of unauthorised works, two statutory directions to reduce the capacity of dams and warning letters were issued. However, information was not available to show exactly which of these non-compliances were found in the Clarence WSP.

The plans are currently subject to a reactive compliance regime and NRAR has reported since 2018 on compliance activity within these plan areas as shown in **Table 5** below.¹⁰⁷

Available information doesn't indicate if there is a good or poor level of compliance in the plan areas. The fact that there is a low level of alleged breaches provides some information in relation to the level of compliance. However, it is unknown whether the level of community awareness is high enough for this to be a reliable indicator.

¹⁰⁴ NRAR (2019) *Compliance outcomes*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0011/227378/NRAR-compliance-outcomes-2018-compared-with-2017.pdf.

¹⁰⁵ NRAR (2019) *Natural Resources Access Regulator Progress Report*, pp. 7 and 46. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0007/272689/NRAR-progress-report-2018-19.pdf.

¹⁰⁶ NRAR (2019) *Compliance outcomes*. Available at: https://www.industry.nsw.gov.au/__data/assets/pdf_file/0011/227378/NRAR-compliance-outcomes-2018-compared-with-2017.pdf.

¹⁰⁷ NRAR (n.d.) *How we're doing. Compliance activities and outputs*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/reports-data/how-were-doing>.

Table 5: Publicly reported enforcement activity relevant to the audit period¹⁰⁸

Plan	Inspections	Alleged breach notifications	Investigations finalised	Advisory letters issued	Formal warnings	Statutory notices	PINs	Prosecutions finalised
Brunswick WSP 2016 (April 2018-April 2020)	2	8	2	3	1	0	0	0
Clarence 2016 (Oct 2018-August 2019)	10	29	50	8	4	6	4	0
Clyde WSP 2016 (April 2018-April 2020)	4	12	9	3	0	2	1	0
Deua WSP 2016 (Jan 2019-April 2020)	0	8	6	0	0	0	0	0
Macleay WSP 2016 (April 2018-April 2020)	9	27	17	4	4	0	0	0
Snowy Genoa WSP 2016 (April 2018-April 2020)	2	9	8	1	1	0	2	0
Tuross WSP 2016 (April 2018-April 2020)	3	9	9	2	0	0	3	0
Nambucca WSP 2016 (April 2018-April 2020)	5	19	14	4	3	0	0	0

¹⁰⁸ This audit did not seek to establish the quality of the enforcement regime and how these incidents were finalised.

13.4 Potential impacts

Not including mandatory conditions in the terms of the water supply work approvals and WALs risks uncontrolled take and installation and use of works that may impact directly on neighbouring groundwater users (both licensed and operating under basic landholder rights) and the environment.

Without mandatory conditions in place, NRAR (and its predecessors) cannot undertake enforcement activity should there be instances of non-compliance.

The plans are largely implemented through water users complying with mandatory conditions. Without mandatory conditions, the plans cannot be given effect. The Commission notes that it was out of scope for this audit to comment on the adequacy of the mandatory conditions provisions in the water sharing plan.

13.5 Recommendations and suggested actions

The Commission makes one recommendation and raises no suggested actions.

The Commission understands that the missing mandatory conditions are the result of omissions by DPIE-Water in coding the mandatory conditions into the WLS, meaning that they are not automatically applied to approvals by assessing and determining officers in NRAR and WaterNSW.

Some mandatory conditions are not coded into WLS for automatic application as some mandatory conditions do not apply in all cases to all water supply work approvals, for example, in cases where the bore was constructed before the plan.

The process that WaterNSW and NRAR assessing officers should follow in relation to the addition of mandatory conditions on a case by case basis to new or amended individual WALs or approvals is not clear. This means that there is a risk that assessing officers may miss mandatory condition that are applicable on a new application for an approval or they may add them as discretionary conditions, which are subject to objections by applicants (not in line with the intent of mandatory conditions).

WaterNSW and NRAR are currently updating procedures and WaterNSW is updating the WLS system. There is an opportunity to incorporate any changes made as part of improving this process into WLS and procedural updates in WaterNSW and NRAR.

R 9	<p>DPIE-Water to review water licensing system code and associated application processes in NRAR and WaterNSW to ensure mandatory conditions in approvals and WALs are applied as relevant going forward. This should include setting up a process to communicate clearly with NRAR and WaterNSW those conditions omitted at plan commencement that are applicable to some approvals or WALs that need to be considered and added as mandatory conditions on a case by case basis for each plan.</p>
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14 Criterion 10 - Amendments

14.1 Criterion overview

Section 45(1) of the Act allows for water sharing plans to be amended under specific conditions. Part 12¹⁰⁹ or 13¹¹⁰ of each plan (as relevant) includes amendment provisions. While none of the plans contain mandatory amendment provisions, they all contain provisions that allow the plans to be amended for specified reasons (non-mandatory amendments). As such, the Commission has focused on non-mandatory amendment provisions and assessed if they have been given due consideration.

14.2 Current roles, systems and processes

DPIE-Water is responsible for implementing amendment provisions and updating plans as required under Section 42 and 45(1) of the Act.

The Environment Minister must concur with proposed amendments as required under Clause 45(3) of the Act.

There are currently no documents, procedures, systems or process used to track amendments identified in water sharing plans. There is no trigger identified for documenting decisions made, studies undertaken or required actions for implementation. DPIE-Water use a spreadsheet to track amendments that have been gazetted.

The Commission considers there are improvements in the way amendments are considered as presented in **Chapter 14.5**.

14.3 Non-mandatory amendment provisions were not duly considered

The Commission found there was no evidence to review in relation to non-mandatory amendments. No amendments have been made or are proposed to be made by the end of the audit period.

The Commission considered that some of these provisions did not warrant further examination in this audit. For example, amendment provisions that are administrative, related to provisions that are currently not being implemented (such as LTAAEL provisions), related to licences or activities that do not exist in the plan areas (such as Aboriginal community development licences), or those applicable after Year 5 of a plan, which is outside the audit period.

However, the Commission identified two examples where due consideration was not given to non-mandatory amendments.

¹⁰⁹ Part 12 relates to Brunswick, Clarence, Clyde, Deua, Snowy Genoa and Nambucca plans.

¹¹⁰ Part 13 relates to Macleay and Tuross plans.

No documented decision in relation to extending cease to take exemptions for stock watering purposes in any of the eight plans

Provisions set out in all the plans¹¹¹ that relate to potentially amending plan clauses in relation to stock watering purposes. A decision whether to extend the exemption of the cease to take conditions or to modify the volume of water permitted to be taken for stock watering purposes after Year 3 of the plans.

DPIE-Water staff advised that no monitoring has been done to inform a decision around this amendment, which was considered contentious at plan commencement, and therefore would have warranted some monitoring and subsequent documented decision around these amendment provisions.

Native title determinations in the audit period have not been reflected in the plans

The Brunswick, Clarence and Nambucca plans were not amended to acknowledge native title determinations that occurred in the audit period:

- In the Brunswick Plan, native title determination NSD6020/2001 (NCD2019/001)¹¹² – Bundjalung People of Byron #3 indicates that native title exists in parts of the determination area but is not reflected in the Plan.¹¹³
- In the Clarence Plan, native title determination NSD2300/2011 (NCD2017/002)¹¹⁴ - Western Bundjalung People Part A occurred during the audit period but has not been reflected in the Plan.¹¹⁵
- In the Nambucca Plan, Native title determination NSD1350/2016 (NCD2019/002)¹¹⁶ – Gumbaynggirr People #3 has not been reflected in the Plan.¹¹⁷

Notwithstanding any contemporary improvements DPIE-Water is making to new plans, the Commission expects that, at a minimum, plans should be amended to reflect the latest native title agreements, even if specific take volumes have not yet been negotiated. This could occur in a similar way to Clause 20 in the Clarence Plan, which acknowledges native title rights in place at plan commencement. Further an estimate of native title use could be made in the same way basic landholder rights are estimated in the plans, which could be updated if and when a specific water extraction amount is agreed.

¹¹¹ Clause 73(c) in the Brunswick Plan, Clause 73(e) in the Clarence Plan, Clause 69(c) in the Clyde Plan, Clause 70(e) in the Deua Plan, Clause 78(e) in the Macleay Plan, Clause 68(e) in the Snowy Genoa Plan, Clause 70 in the Tuross Plan, Clause 72(c) in the Nambucca Plan.

¹¹² National Native Title Tribunal. National Native Title Register Details. NSD6020/2001 (NCD2019/001)- Bundjalung People of Byron Bay #3. Available at:
http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/Pages/NNTR_details.aspx?NNTT_Fileno=NCD2019/001

¹¹³ NT determination NSD6020/2001 (NCD2019/001) includes the right to “take and use the water for personal, domestic and communal purposes (including cultural purposes)- effective 20 May 2020.

¹¹⁴ National Native Title Tribunal. National Native Title Register Details. NSD2300/2011 (NCD2017/002) - Western Bundjalung People Part A. Available at:
http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/NNTR%20Extracts/NCD2017_002/NNTRExtract_NCD2017_002.pdf

¹¹⁵ Native Title determination NCD2300/2011 includes the right to “take and use the water for personal, domestic, communal purposes (including cultural purposes) - effective 12 July 2018.

¹¹⁶ National Native Title Tribunal. National Native Title Register Details. NSD1350/2016 (NCD2019/002) - Gumbaynggirr People #3. Available at:
http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/NNTR%20Extracts/NCD2019_002/NNTRExtract_NCD2019_002.pdf

¹¹⁷ Native Title determination NSD1350/2016 includes the right to “take and use waters on or in the Native Title Area” - effective 26 November 2019.

That the plans have not been updated for these examples is evidence that the process for triggering a plan change as a result of a non-mandatory amendment is not functional. The

Regarding amendment provisions for native title provisions specifically, DPIE-Water advised that there have been limited native title determinations in NSW and these often involve ongoing consultation and it is often difficult to quantify volumes allocated under determinations. DPIE-Water indicated that the new drafting process for water sharing plans refers directly to any determination in place and does allow for an amendment of the plan to provide for such referencing or any more specific requirements if identified in the determination. DPIE-Water also indicated that a dedicated staff member works on native title determinations, who works with the planning team to identify determinations that need to be acknowledged in plans for new plans. While the Commission supports these actions as they are leading to positive changes for new plans, they have not led to any amendments of these plans.¹¹⁸

14.4 Potential impacts

Potential impacts of not implementing identified amendment provisions include:

- potentially poor outcomes for Aboriginal users with native title determinations and rights within water sources that have not been recognised in the plans
- potentially poor socio-economic and or environmental outcomes relating to identified studies or monitoring that have not been implemented that are critical to implementing plan amendments.

14.5 Recommendations and suggested actions

The Commission makes one recommendation and raises one suggested action.

To improve the functionality of process to amend plans and reduce the risk of not triggering work required to duly consider plan amendments the following recommendation is made.

R 10	DPIE-Water to formalise and implement a process to document the: <ul style="list-style-type: none">- decision-making process underpinning if and how to implement potential amendment provisions- status of potential amendment provisions.
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To ensure that native title determinations that have occurred in the audit period are duly recognised in the plan, the Commission raises the following suggested action.

SA 10	DPIE-Water to amend the Brunswick, Clarence and Nambucca plans to reflect current native title determinations.
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¹¹⁸ Further progress in this area is recommended to support native title rights in line with the recommendations of the Water Sharing Plan reviews (see Review of the Hunter and Lower North Coast Sharing Plans available on the Commission's website at: <https://www.nrc.nsw.gov.au/wsp-reviews>).