



Natural Resources Commission

Final report  
**Audit of the implementation of coastal  
groundwater sharing plans**

March 2021



## Enquiries

Enquiries about this report should be directed to:

Name	Marguerite Collins
Phone	(02) 9228 4844
Fax	(02) 9228 4970
E-Mail	nrc@nrc.nsw.gov.au
Postal address	GPO Box 5341, Sydney NSW 2001

## 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 Yuin, Dharawal, Bidwell, Ngarigo, Bundjalung, Gumbaynggirr, Dunghutti, Worimi, Yaegl, Awabakal, Nganyaywana, Geawegal, Gomeroi, Warrabinga-Wiradjuri, Dangaan Balun, Wonnarua Traditional Owners past, present and future, Local Aboriginal Land Councils as well as other Aboriginal peoples for whom these waterways are significant.

This work is copyright. The *Copyright Act 1968* permits fair dealing for study, research, news reporting, criticism and review. Selected passages, table or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

Document No D20/4506

ISBN: 978 1 925204 60 5

## 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 <b>Section 2.2</b> 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

# Table of Contents

<b>1</b>	<b>Executive summary</b>	<b>1</b>
1.1	Audit conclusion	1
1.2	Audit findings and recommendations	1
<b>2</b>	<b>The Commission's role and audit approach</b>	<b>7</b>
2.1	The Commission's role in auditing management plans	7
2.2	Audit objective	7
2.3	Audit standards	7
2.4	Audit criteria	8
2.5	Audit procedures	8
2.6	Limitations	9
2.7	Exclusions	9
<b>3</b>	<b>Audit context</b>	<b>9</b>
3.1	Purpose of water sharing plans under the Act	9
3.2	Challenges to implementing the water sharing plans	10
<b>4</b>	<b>Plan areas</b>	<b>11</b>
4.1	South Coast groundwater sources	11
4.2	North Coast groundwater sources (coastal sands, fractured and porous rock)	14
<b>5</b>	<b>Criterion 1 – Vision, objectives, strategies and performance indicators</b>	<b>19</b>
5.1	Criterion overview	19
5.2	Current roles, systems and processes	19
5.3	Performance monitoring provisions have not been given effect to	19
5.4	the linkages between performance indicators and objectives are not clear	20
5.5	Potential impacts	20
5.6	DPIE-Water is making efforts to improve MER	20
5.7	Further opportunities to improve	21
<b>6</b>	<b>Criterion 2 – Long-term average annual extraction limits</b>	<b>22</b>
6.1	Criterion overview	22
6.2	Current roles, systems and processes	23
6.3	LTAAEL provisions have not been given effect to	23
6.4	Potential impacts	24
6.5	DPIE Water is making efforts to improve	24
6.6	Further opportunities to improve	26
<b>7</b>	<b>Criterion 3 – Available water determinations</b>	<b>27</b>
7.1	Criterion overview	27
7.2	Current roles, systems and processes	27
7.3	Available Water Determination provisions were partially implemented	28
7.4	Potential impacts	29
7.5	Further opportunities to improve	29

<b>8</b>	<b>Criterion 4 – Granting access licences</b>	<b>30</b>
8.1	Criterion overview	31
8.2	Current roles, systems and processes	32
8.3	Granting access licences provisions were partially implemented	33
8.4	Potential impacts	35
8.5	Further opportunities to improve	35
<b>9</b>	<b>Criterion 5 – Managing access licences</b>	<b>37</b>
9.1	Criterion overview	37
9.2	Current roles, systems and processes	37
9.3	Account management provisions were partially implemented	38
9.4	Potential impacts	39
9.5	DPIE-Water is improving water take information availability	40
9.6	Further opportunities to improve	40
<b>10</b>	<b>Criterion 6 – Rules for water supply work approvals</b>	<b>41</b>
10.1	Criterion overview	41
10.2	Current roles, systems and processes	42
10.3	Rules for water supply work approvals were partially implemented	44
10.4	Potential impacts	45
10.5	Further opportunities to improve	45
<b>11</b>	<b>Criterion 7 – Access licence dealing rules</b>	<b>46</b>
11.1	Criterion overview	46
11.2	Current roles, systems and processes	47
11.3	Rules for access licence dealing rules were implemented	48
11.4	Further opportunities to improve	49
<b>12</b>	<b>Criterion 8 – Mandatory conditions</b>	<b>51</b>
12.1	Criterion overview	51
12.2	Current roles, systems and processes	52
12.3	Rules for mandatory conditions have been partially implemented	54
12.4	Potential impacts	57
12.5	Further opportunities to improve	58
<b>13</b>	<b>Criterion 9 – Amendments</b>	<b>59</b>
13.1	Criterion overview	59
13.2	Current roles, systems and processes	59
13.3	Non-mandatory amendment provisions were not duly considered	60
13.4	Potential impacts	61

# 1 Executive summary

The Natural Resources Commission (the Commission) has audited the three water sharing plans for groundwater in the north and south coasts of NSW<sup>1</sup> (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).<sup>2</sup>

## 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 Commission also found that key aspects of the plans were being implemented as outlined below:

- water access licences and supply work approvals were generally assessed and processed in accordance with legislative requirements
- water access licence management tools and processes are in place to manage water access licences
- dealings are being undertaken in accordance with legislative requirements
- mandatory conditions are translated accurately to conditions for water access licences
- Available water determinations (AWDs) were made and generally applied to licences in accordance with legislative requirements (however, extraction from previous years was not considered as part of this process).

However, some exceptions were found. These are summarised in **Table 1**, which outlines the audit findings and recommendations against the nine 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 plan provisions relating to limits to the availability of water, specifically long-term average annual extraction limits

---

<sup>1</sup> The plans reviewed in this report include the: *Water Sharing Plan for the South Coast Groundwater Sources 2016*; *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources 2016*; *Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016*.

<sup>2</sup> 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*.

- **Criterion 3:** The relevant responsible parties have implemented plan provisions relating to limits to the availability of water, specifically available water determinations
- **Criterion 4:** The relevant responsible parties have implemented plan provisions relating to granting access licences
- **Criterion 5:** The relevant responsible parties have implemented plan provisions relating to managing access licences
- **Criterion 6:** The relevant responsible parties have implemented plan provisions relating to rules for water supply work approvals
- **Criterion 7:** The relevant responsible parties have implemented plan provisions relating to access licence dealing rules
- **Criterion 8:** The relevant responsible parties have implemented plan provisions relating to mandatory conditions
- **Criterion 9:** 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 strongly encourages all recommendations to be implemented within 12 months as soon as practicable thereafter.

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.

Relevant regional strategies prepared by DPIE-Water recognise that:

- these coastal groundwater resources are important as they maintain wetlands and support base flows to rivers and creeks, as well as water for consumptive use such as irrigation, industry and town water supplies<sup>3</sup>
- groundwater levels, quality and recharge are affected by increasing levels of surface water extraction due to urbanisation as well as changing climatic conditions. These relationships must be better understood through improved modelling, metering and monitoring so these resources can be developed in a sustainable way.<sup>4,5</sup>

---

<sup>3</sup> NSW Government (2020) *Draft Regional Water Strategy. Far North Coast: Strategy*, pp. 13-14, 54. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0017/329012/draft-rws-fnc-strategy.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/329012/draft-rws-fnc-strategy.pdf).

<sup>4</sup> NSW Government (2020) *Draft Regional Water Strategy. Far North Coast: Strategy*, pp. 16, 78, 55. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0017/329012/draft-rws-fnc-strategy.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/329012/draft-rws-fnc-strategy.pdf).

<sup>5</sup> NSW Government (2020) *Draft Regional Water Strategy. South Coast: Strategy*, pp. 37, 57. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0020/329015/draft-rws-sc-strategy.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0020/329015/draft-rws-sc-strategy.pdf).



**Table 1: Audit findings and recommendations**

Findings	Recommendations
<b>Criterion 1 Finding: The relevant responsible parties have not implemented plan provisions relating to vision, objectives, strategies and performance indicators</b>	
<p><b>F 1</b> Provisions related to vision, objectives, strategies, and performance indicators under Part 2 of each plan were not implemented in the audit period for any of the plans.</p>	<p><b>R 1</b> DPIE-Water to lead the monitoring and evaluation of performance indicators to measure the success of the strategies to reach the objectives set out in Part 2 of each plan and to use generated data to support decision making for plan implementation.</p>
<b>Criterion 2 Finding: The relevant responsible parties have not implemented plan provisions relating to limits to the availability of water, specifically long-term average annual extraction limits</b>	
<p><b>F 2</b> Provisions related to limits to availability of water, specifically Long Term Average Annual Extraction Limits (LTAAEL) set out in Part 6 Division 1 of each plan (as required under clauses 26 and 27 of the South Coast Plan, clauses 28 and 29 of the North Coast Coastal Sands Plan and clauses 28 and 29 of the North Coast Fractured and Porous Rock Plan) were not implemented in any of the plans.</p>	<p><b>R 2</b> DPIE-Water to obtain reliable extraction data and use it to assess LTAAEL compliance for these three plans in accordance with Part 6 Division 1 of each plan.</p>
<b>Criterion 3: The relevant responsible parties have partially implemented plan provisions relating to limits to the availability of water, specifically available water determinations</b>	
<p><b>F 3.1</b> Long Term Average Annual Extraction Limit compliance assessment was not undertaken (see <b>F 2</b>). This LTAAEL compliance assessment was therefore not considered in making Available Water Determinations for access licences as required by clauses 31 and 32 in the South Coast Plan, clauses 30 and 31 in the North Coast Coastal Sands Plan, and clauses 33 and 34 in the North Coast Fractured and Porous Rock Plan.</p> <p><b>F 3.2</b> In the first year (2016/17) of the South Coast Plan, Available Water Determinations applied to access licences in the Lachlan Fold Belt and Sydney Basin South Coast water sources were not made in accordance with the relevant Available Water Determination orders.</p>	<p><b>R 3.1</b> DPIE-Water to implement <b>R 2</b> and use the Long Term Average Annual Extraction Limit compliance assessment to inform Available Water Determinations adjustments as required by Clause 27 of the South Coast Plan, Clause 29 of the North Coast Coastal Sands Plan and Clause 29 of the North Coast Fractured and Porous Rock Plan.</p>
<b>Criterion 4 Finding: The relevant responsible parties have partially implemented plan provisions relating to granting access licences</b>	
<p><b>F 4.1</b> In the North Coast Fractured and Porous Rock Plan, mandatory conditions were not included in the Notice of Decision to water access licence (WAL) applicants in the audit period prior to 20 May 2020, as required to give effect to these conditions under sections 66A and 66(1A) of the Act.</p> <p><b>F 4.2</b> There were gaps to requirements in water access licences converted from former entitlements, including:</p> <ul style="list-style-type: none"> <li>- in the North Coast Fractured and Porous Rock Plan, water access licences were recorded in the Water Access Licence Register with errors relating to the plan and/or water source at plan commencement. Some work has been done to rectify this issue, but the current extent of this issue is unknown</li> <li>- in the North Coast Fractured and Porous Rock Plan, water access licence holders have not been notified of relevant conditions since plan commencement to give effect to Section 66(1A) of the Act.</li> <li>- in the South Coast Plan and North Coast Coastal Sands Plan, water access licence holders did not receive written notice of the mandatory conditions until February 2018 (20 months after plan commencement), giving delayed effect to Section 66(1A) of the Act.</li> </ul>	<p><b>R 4.1</b> WaterNSW to issue statements of conditions to water access licence holders inclusive of conditions.</p> <p><b>R 4.2</b> WaterNSW (with the support of the Natural Resources Access Regulator and DPIE-Water) to lead an investigation into the incorrect conversion of water access licences in the North Coast Fractured and Porous Rock Plan and to carry out required communications with customers and Land Registry Services in relation to required changes to water access licences and water access licence conditions.</p> <p><b>R 4.1</b> also applies.</p>
<b>Criterion 5 Finding: The relevant responsible parties have partially implemented plan provisions relating to managing access licences</b>	
<p><b>F 5</b> While provisions relevant to each plan are set up in the Water Accounting System, comprehensive extraction data are not available to enable the management of individual accounts to ensure maximum allowable take is not exceeded in accordance with Part 8 of each plan.</p>	<p><b>R 5</b> 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 of each plan.</p>

Findings	Recommendations
<b>Criterion 6 Finding: The relevant responsible parties have partially implemented plan provisions relating to rules for water supply work approvals</b>	
<p><b>F 6.1</b> In the North Coast Fractured and Porous Rock Plan, mandatory conditions were not included in the Statement of Approval to supply work approval applicants in the audit period prior to 20 May 2020, as required to give effect to these conditions under sections 100A and 100(1A) of the Act.</p>	<p><b>R 6.1</b> WaterNSW to issue statements of approvals to water access licence holders inclusive of conditions.</p>
<p><b>F 6.2</b> There were gaps to requirements for supply work approvals converted from former entitlements under the <i>Water Act 1912</i>, including:</p> <ul style="list-style-type: none"> <li>- in the North Coast Fractured and Porous Rock Plan, supply work approval holders have not been notified of relevant conditions since plan commencement as required to give effect to Section 100(1A)</li> <li>- in the South Coast Plan and North Coast Coastal Sands Plan, supply work approval holders did not receive written notice of the mandatory conditions until February 2018 (20 months after plan commencement), giving delayed effect to Section 100(1A) of the Act.</li> </ul>	<p><b>R 6.1</b> also applies</p>
<b>Criterion 7 Finding: The relevant responsible parties have implemented plan provisions relating to access licence dealing rules</b>	
<p><b>Meets criteria, no findings identified.</b></p>	<p><b>Meets criteria, no recommendations identified.</b></p>
<b>Criterion 8 Finding: The relevant responsible parties have partially implemented plan provisions relating to mandatory conditions</b>	
<p><b>F 8</b> Mandatory conditions for bore construction intended to minimise environmental harm were not included on water supply work approvals in accordance with Part 11, Clause 56(1) of the North Coast Fractured and Porous Rock Plan, Clause 51(1) of the South Coast Coastal Sands Plan and Clause 56(1) of the North Coast Coastal Sands Plan.</p> <p><i>Note that F 4.1, F 4.2, F 6.1 and F 6.2 (and associated recommendations) are also relevant to this Criterion – these findings relate to mandatory conditions being delayed in being given effect due to a lack of or delayed notification.</i></p>	<p><b>R 8</b> DPIE-Water to review Water Licensing System (WLS) coding and associated application processes in NRAR and WaterNSW to ensure mandatory conditions for bore construction in accordance with Part 11, Clause 56(1) of the North Coast Fractured and Porous Rock Plan, Clause 51(1) of the South Coast Coastal Sands Plan and Clause 56(1) of the North Coast Coastal Sands Plan are applied to all water supply work approvals going forward.</p>
<b>Criterion 9 Finding: The relevant responsible parties have implemented plan provisions relating to amendments (where these are not optional), but there is no evidence that identified amendments (which may include optional amendments) have been given due consideration</b>	
<p><b>F 9</b> Due consideration has not been given to non-mandatory amendments set out in Part 12 of each plan.</p>	<p><b>R 9</b> DPIE-Water to formalise and implement a process to:</p> <ul style="list-style-type: none"> <li>- document the decision-making process underpinning if and how to implement potential amendment provisions</li> <li>- document the status of potential amendment provisions.</li> </ul>

**Table 2: Audit observations and suggested actions**

Observations	Suggested actions to support recommendations
<p><b>O 1</b> There is no transparent reporting of plan performance in relation to progress towards achieving stated objectives.</p>	<p><b>SA 1</b> DPIE-Water to publicly report on progress towards plan objectives.</p>
<p><b>O 2</b> Roles, systems and processes, including quality assurance for Long Term Average Annual Extraction Limit assessment and compliance work are not documented.</p>	<p><b>SA 2</b> DPIE-Water to document the roles, responsibilities, systems, processes and procedures relevant to Long Term Average Annual Extraction Limit management and compliance for coastal groundwater systems.</p>
<p><b>O 3</b> Procedures for determining Available Water Determination amounts in accordance with requirements set out in the Act and Regulation, including data requirements and methods appropriate for coastal groundwater systems, are not available.</p>	<p><b>SA 3</b> DPIE-Water to document the roles and responsibilities, systems, processes and procedures relevant to determining Available Water Determination amounts for coastal groundwater systems.</p>
<p><b>O 4.1</b> Mandatory conditions for North Coast Fractured and Porous Rock Plan are visible in the online NSW Water Register, even though they do not yet have effect under Section 66(1A) of the Act.</p>	<p><b>SA 4.1</b> WaterNSW to implement controls in the Water Licensing System so that only conditions that have been notified to water access licence holders appear on the NSW Water Register.</p>
<p><b>O 4.2</b> Formal guidance for determining controlled allocation volumes is not documented or transparent to stakeholders.</p>	<p><b>SA 4.2</b> DPIE-Water to formally document guidance for how the percent of unassigned water in a controlled allocation is determined. This should be externally expert reviewed and made available to stakeholders.</p>
<p><b>O 5</b> DPIE-Water participates in developing and reviewing the database configuration rules coded into the Water Accounting System, though this process is informal.</p>	<p><b>SA 5</b> 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.</p>
<p><b>O 6</b> Mandatory conditions for North Coast Fractured and Porous Rock Plan are visible in the online NSW Water Register, even though they do not yet have effect under Section 100(1A) of the Act.</p>	<p><b>SA 6</b> WaterNSW to implement controls in the Water Licensing System so that only conditions that have been notified to supply work approval holders appear on the NSW Water Register.</p>
<p><b>O 7.1</b> The NSW Water Register contains dealing related information which is incomplete and uses old terminology.</p>	<p><b>SA 7.1</b> WaterNSW to increase the accuracy and extent of the dealings information available the NSW Water Register for improved transparency.</p>
<p><b>O 7.2</b> DPIE-Water participates in developing and reviewing the database configuration rules coded into the Water Accounting System for dealings, though this process is informal.</p>	<p><b>SA 5</b> applies</p>
<p><b>O 9.1</b> The North Coast Coastal Sands and North Coast Fractured and Porous Rock plans have not been amended to acknowledge native title determinations that have occurred in the audit period.</p>	<p><b>SA 9.1.</b> Amend the North Coast Coastal Sands and North Coast Fractured Rock plans to reflect current native title determinations.</p>
<p><b>O 9.2</b> The plans refer to an outdated version of the minimum construction requirements for water bores in Australia.</p>	<p><b>SA 9.2</b> Amend plan provisions to reflect current minimum construction requirements for water bores in Australia.</p>

## 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.

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 three water sharing plans are being given effect to:

- *Water Sharing Plan for the South Coast Groundwater Sources 2016* (South Coast Plan)
- *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources 2016* (North Coast Coastal Sands Plan)
- *Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016* (North Coast Fractured and Porous Rock 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

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
- **Criterion 2:** The relevant responsible parties have implemented plan provisions relating to limits to the availability of water, specifically long-term average annual extraction limits
- **Criterion 3:** The relevant responsible parties have implemented plan provisions relating to limits to the availability of water, specifically available water determinations
- **Criterion 4:** The relevant responsible parties have implemented plan provisions relating to granting access licences
- **Criterion 5:** The relevant responsible parties have implemented plan provisions relating to managing access licences
- **Criterion 6:** The relevant responsible parties have implemented plan provisions relating to rules for water supply work approvals
- **Criterion 7:** The relevant responsible parties have implemented plan provisions relating to access licence dealing rules
- **Criterion 8:** The relevant responsible parties have implemented plan provisions relating to mandatory conditions
- **Criterion 9:** 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 audit focussed on current implementation practices to determine recommendations. The audit also considered evidence from the full audit period for transparency. The full audit period is defined as being from plan commencement under the Act (July 2016) to the date of receipt of agency comments on the draft report (February 2021).

## 2.5 Audit procedures

Audit procedures included:

- document review, including overarching frameworks, procedures, guidelines, manuals, policies and reports
- interviews with process owners, implementors 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.<sup>6</sup>

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.<sup>7</sup> 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).*

---

<sup>6</sup> 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.

<sup>7</sup> Section 5 of the Act.

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

During the audit period, 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. DPIE-Water indicated that this focus is now returning to a state-wide focus.

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.<sup>8</sup> 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.<sup>9,10,11</sup> In these plan areas, some proactive compliance work focused on specific theme areas has been undertaken by NRAR. However, these projects are underway and no specific compliance information was available to inform this audit. 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. The Commission is not seeking to comment on the appropriateness of decisions regarding NRAR's compliance priorities.

### 3.2.2 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. 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.<sup>12</sup>

Roles and responsibilities for various criteria have changed several times during the audit period.

---

<sup>8</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0020/227324/NRARs-regulatory-priorities-2019-to-2021.pdf).

<sup>9</sup> *Ibid.*

<sup>10</sup> 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>

<sup>11</sup> NRAR's routine monitoring program is focussed on the inland water sharing plan areas.

<sup>12</sup> 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](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.

### 4.1 South Coast groundwater sources

The South Coast Plan is a new plan under the Act and covers the fractured rock, porous rock and coastal sands aquifers of the South Coast of NSW (**Figure 1**). The plan has three groundwater sources, and at plan commencement there was 217.5 ML per year of local water utility access licences, a total of 1,401.5 unit shares for aquifer access licences and an estimated 3,520 ML per year domestic and stock basic landholder entitlements.<sup>13</sup> The plan area covers just over 21,500 square kilometres, extending from the Shoalhaven region along the coast to the Victorian border and inland to the boundary of the Murray-Darling Basin.<sup>14</sup>

The plan area includes the major towns of Ulladulla (population 15,278), Bega (4,668), Jindabyne (2,629) and Batemans Bay (11,294).<sup>15</sup> The plan does not include any of the alluvial aquifers in the plan area, as these are managed alongside surface water resources.<sup>16</sup>

The Plan's background document identifies significant water-dependent ecological values, including:<sup>17</sup>

- significant areas of national parks and reserves, forestry reserves and conservation agreements on private land – just under half of the South Coast region excluding the Snowy Mountain areas (44 percent) is covered by these areas
- over half of NSW's coastal lakes and lagoons
- over 400 significant coastal wetlands and over 60 sensitive estuaries
- over 240 high priority groundwater dependent ecosystems.

Most of the South Coast region is covered by the lands of the Yuin Traditional Owners. The plan area also includes Dharawal lands north of the Shoalhaven River to Jervis Bay, Bidwell lands south of Eden and Ngarigo lands in the Snowy Mountains region.<sup>18</sup> The plan area contains areas of spiritual, cultural and economic importance to the people of these nations, including areas of ceremonial importance associated with major lakes and estuaries.<sup>19</sup>

<sup>13</sup> Part 5 of the *Water Sharing Plan for the South Coast Groundwater Sources 2016* sets out the requirements for water at plan commencement.

<sup>14</sup> DPI-Water (2016) *Water Sharing Plan for the South Coast Groundwater Sources: Background document – Appendix 1*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/166878/south-coast-gw-background.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0009/166878/south-coast-gw-background.pdf).

<sup>15</sup> Australian Bureau of Statistics (2016) *2016 Census QuickStats*. Available at: [https://quickstats.censusdata.abs.gov.au/census\\_services/getproduct/census/2016/quickstat/SSC12030?op=endocument](https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC12030?op=endocument).

<sup>16</sup> DPI-Water (2016) *Water Sharing Plan for the South Coast Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/166878/south-coast-gw-background.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0009/166878/south-coast-gw-background.pdf).

<sup>17</sup> *Ibid.*

<sup>18</sup> Horton, D.R. (1996) Aboriginal Studies Press, The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), and Auslig/Sinclair, Knight, Merz (2020) *AIATSIS map of Indigenous Australia*. Available at: <https://aiatsis.gov.au/explore/articles/aiatsis-map-indigenous-australia>; DPI-Water (2016) *Water Sharing Plan for the South Coast Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/166878/south-coast-gw-background.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0009/166878/south-coast-gw-background.pdf).

<sup>19</sup> DPI-Water (2016) *Water Sharing Plan for the South Coast Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/166878/south-coast-gw-background.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0009/166878/south-coast-gw-background.pdf).



Most licences under the plan are used for irrigation, with a significant proportion also used for town water supply.<sup>20</sup> Primary industries such as dairying, forestry and fishing have historically shaped the settlement of the South Coast region since the 1820s. While these industries remain important employment sources, they are declining in terms of overall employment. Tourism is the major contributor to the regional economy, with the region's marine, estuarine and freshwater environments contributing significantly to its lifestyle, economy and attraction for visitors.<sup>21</sup>

In 2018-19, the contribution of the South Coast Region to gross domestic product was just under \$3 billion, with primary industries (agriculture, forestry, fishing and mining) contributing just under \$100 million.<sup>22</sup> In 2018-19, the total gross value add of tourism (direct and indirect) in the South Coast region was just over \$2 billion.<sup>23</sup> The region's economy has been significantly impacted by the 2019-20 severe bushfires and Covid-19 pandemic (this is also the case for the North Coast plans described below).<sup>24</sup>

---

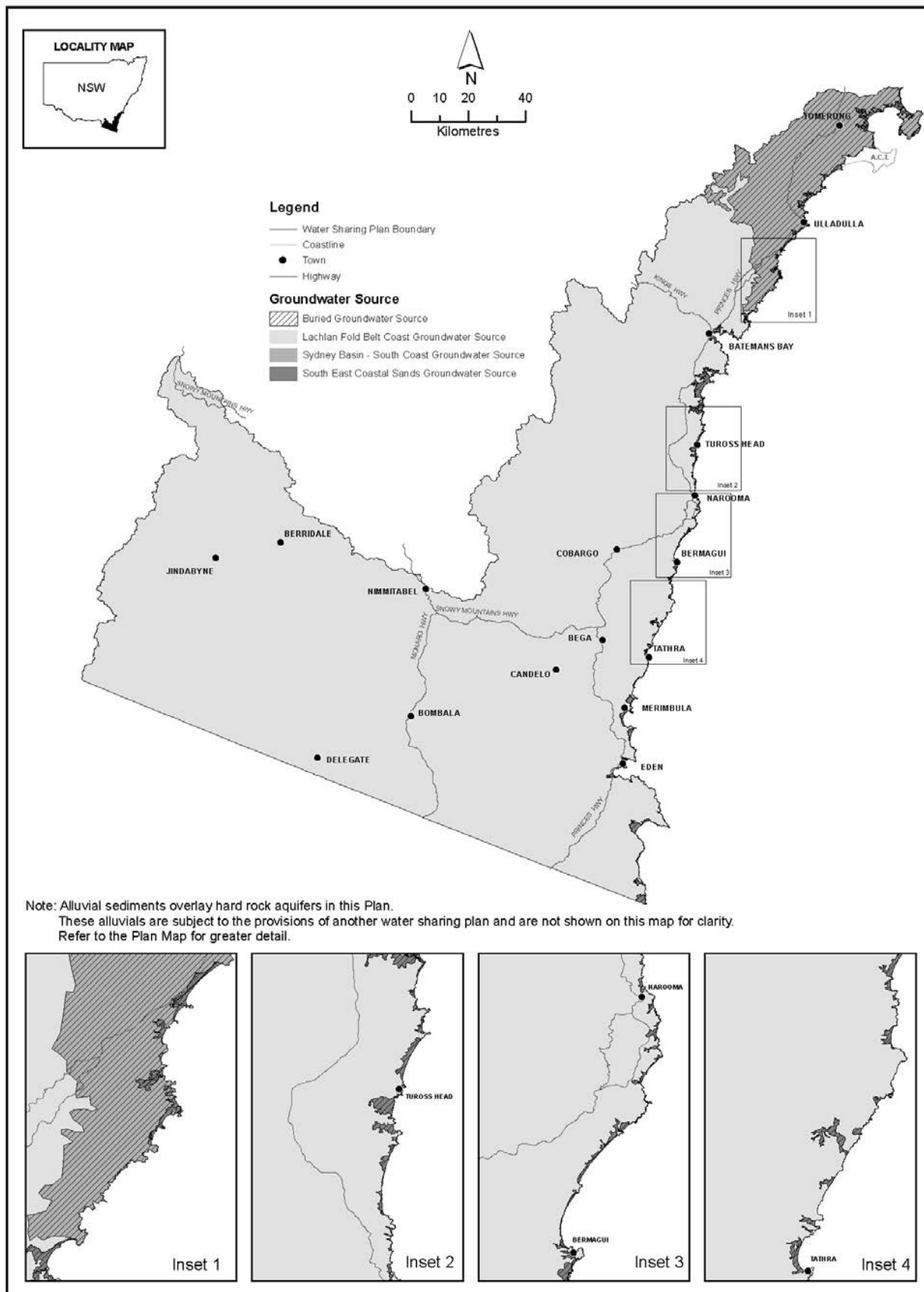
<sup>20</sup> *Ibid.*

<sup>21</sup> DPI-Water (2016) *Water Sharing Plan for the South Coast Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/166878/south-coast-gw-background.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0009/166878/south-coast-gw-background.pdf).

<sup>22</sup> SGS Economics and Planning (2019) *GDP report: Economic Performance of Australia's Cities and Regions*. Available at: <https://www.sgsep.com.au/publications/insights/gdp-report-economic-performance-of-australias-cities-and-regions> (note that Hillston figures are grouped with Griffith and the Murrumbidgee and not disaggregated).

<sup>23</sup> Destination NSW (2019) *Contribution of Tourism to NSW – South Coast*. Available at: <https://www.destinationnsw.com.au/tourism/facts-and-figures/economic-value>.

<sup>24</sup> Burnside, N. (2020) 'Coronavirus restrictions hit NSW South Coast businesses and tourism sector hard in wake of bushfires', *ABC News*, 30 March. Available at: <https://www.abc.net.au/news/2020-03-30/nsw-south-coast-fire-recovery-business-coronavirus-canberra/12101102?nw=0>.



**Figure 1: Plan area maps for the Water Sharing Plan for the South Coast Groundwater Sources 2016**  
(Note: this map is sourced from the plan's background document and provides an overview only. The legal plan map can be found at [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au))

## 4.2 North Coast groundwater sources (coastal sands, fractured and porous rock)

The North Coast Coastal Sands Plan covers the coastal sand aquifers of the North Coast of NSW (**Figure 2** and Error! Reference source not found.). Some of the groundwater sources in the plan were previously covered by the *Water Sharing Plan for the Stuarts Point Groundwater Source* and the *Water Sharing Plan for the Tomago Tomaree and Stockton Groundwater Sources* made in 2004.<sup>25</sup> The plan has 14 groundwater sources and at plan commencement there was 7,027 ML per year of local water utility access licences, 29,000 ML per year of major utility access licences, 16,096.5 unit shares for aquifer access licences and an estimated 1,687 ML per year for domestic and stock basic landholder entitlements.<sup>26</sup> The plan area covers just under 2,500 square kilometres, including the major towns of Newcastle (2019 estimated resident population 165,571), Forster/Tuncurry (21,218), Coffs Harbour (77,277), Byron Bay (35,081) and Tweed Heads (8,654).<sup>27</sup>

The North Coast Fractured and Porous Rock Plan covers the fractured and porous rock aquifers of the North Coast of NSW (**Figure 2** and Error! Reference source not found.). The plan has 13 groundwater sources, ten of which have never been covered by a water sharing plan.<sup>28</sup> At plan commencement there was 18,919 ML per year of local water utility access licences, a total of 112,029 unit shares for aquifer access licences and an estimated 26,707 ML per year domestic and stock basic landholder entitlements.<sup>29</sup> The plan area covers approximately 76,000 square kilometres. In addition to the population centres above, this plan extends further inland, also including the major towns of Armidale (population 23,352), Singleton (13,214), Muswellbrook (12,075), Casino (10,914) and Scone (5,624).<sup>30</sup>

The North Coast region has significant water-dependent ecological values. The water table in the coastal sands groundwater sources covered by the plan is relatively close to the surface and is often expressed as wetlands and sand dune back barrier swamps, sustaining numerous coastal groundwater-dependant ecosystems.<sup>31</sup> Groundwater dependent ecosystems in the plan area are listed in Appendix 4 of the plan.<sup>32</sup>

<sup>25</sup> Department of Primary Industries- Water (2016). *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources. Background Document*. p.1 Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0010/166870/northcoast-coastal-sands-groundwater.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/166870/northcoast-coastal-sands-groundwater.pdf)

<sup>26</sup> Part 5 of the *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources 2016* sets out the requirements for water at plan commencement.

<sup>27</sup> 2019 Australian Bureau of Statistics estimated resident population data sourced from community profiles from .id demographic resources (.id (2020) *Community profiles*. Available at: <https://profile.id.com.au/>).

<sup>28</sup> Department of Primary Industries- Water (2016). *Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources. Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0004/166873/nth-coast-fractured-porous-rock-gw-background.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0004/166873/nth-coast-fractured-porous-rock-gw-background.pdf)

<sup>29</sup> Part 5 of the *Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016* sets out the requirements for water at plan commencement.

<sup>30</sup> Australian Bureau of Statistics (2016) *2016 Census QuickStats*. Available at: [https://quickstats.censusdata.abs.gov.au/census\\_services/getproduct/census/2016/quickstat/SSC12030?op=endocument](https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC12030?op=endocument).

<sup>31</sup> DPI-Water (2016) *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0010/166870/northcoast-coastal-sands-groundwater.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/166870/northcoast-coastal-sands-groundwater.pdf).

<sup>32</sup> NSW Government (2016) *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources 2016 – Appendix 4 – Overview of the GDE Map*. Available at: <https://www.legislation.nsw.gov.au/view/html/inforce/current/sl-2016-0374#sch.4>.

The plan area includes nationally and internationally important wetlands, including the Ramsar-listed Hunter Estuary Wetlands<sup>33</sup> and Myall Lakes.<sup>34</sup> The plan area also contains large areas of the hinterland and coastline conserved in national parks and conservation areas, which include many of the high environmental value areas associated with the coastal sand groundwater sources.<sup>35</sup>

Both plan areas include the land of seven different Aboriginal nations; the Bundjalung nation in the Tweed and Northern Rivers region; the Gumbaynggirr nation between the Nambucca and Clarence Rivers and west to the Great Dividing Range; the Dunghutti nation in the Macleay Valley; the Biripi (or Birpai) nation in the Hastings and Manning regions; the Worimi nation in the Great Lakes and Port Stephens; the Yaegl nation around Coffs Harbour, and the Awabakal nation from the Hunter River to Tuggerah Lake.<sup>36</sup>

The fractured and porous rock plan area also includes the land of the Nganyaywana nation in the Armidale region, and the Geawegal, Gomeri, Warrabinga-Wiradjuri, Dangaan Balun, and Wonnarua nations in the Upper Hunter Valley region.<sup>37</sup>

The plan areas contain areas of spiritual, cultural and economic importance to the people of these nations, including areas of ceremonial importance and cultural sites associated with major lakes and estuaries.<sup>38</sup> The area's water resources support a high diversity and abundance of natural resources which historically supported Aboriginal nations and continue to be integral to their cultures.<sup>39</sup> The plan area also contains the Worimi Conservation Lands, which are managed through a joint agreement between Worimi Traditional Owners and the NSW National Parks and Wildlife Service.<sup>40</sup>

Most licences under the coastal sands plan are used for domestic purposes and town water supply, with some limited irrigation use.<sup>41</sup> Many population centres in the plan areas have experienced significant population growth from people attracted to the economic opportunity, affordability and lifestyle benefits of the rural and coastal landscapes.<sup>42</sup> This population growth is expected to continue.

---

<sup>33</sup> NSW DPIE (2018) *Hunter Estuary Wetlands*. Available at: <https://www.environment.nsw.gov.au/topics/water/wetlands/internationally-significant-wetlands/hunter-estuary-wetlands>.

<sup>34</sup> DPI (n.d.) *Port Stephens - Great Lakes Marine Park*. Available at: <https://www.dpi.nsw.gov.au/fishing/marine-protected-areas/marine-parks/port-stephens-marine-park>.

<sup>35</sup> DPI-Water (2016) *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0010/166870/northcoast-coastal-sands-groundawter.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/166870/northcoast-coastal-sands-groundawter.pdf).

<sup>36</sup> Horton, D.R. (1996) Aboriginal Studies Press, The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), and Auslig/Sinclair, Knight, Merz (2020) *AIATSIS map of Indigenous Australia*. Available at: <https://aiatsis.gov.au/explore/articles/aiatsis-map-indigenous-australia>; DPI-Water (2016) *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0010/166870/northcoast-coastal-sands-groundawter.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/166870/northcoast-coastal-sands-groundawter.pdf).

<sup>37</sup> *Ibid.*

<sup>38</sup> DPI-Water (2016) *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0010/166870/northcoast-coastal-sands-groundawter.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/166870/northcoast-coastal-sands-groundawter.pdf).

<sup>39</sup> *Ibid.*

<sup>40</sup> Worimi Conservation Lands Board of Management (n.d.) *Worimi Conservation Lands*. Available at: <https://worimiconservationlands.com/>.

<sup>41</sup> DPI-Water (2016) *Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0010/166870/northcoast-coastal-sands-groundawter.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/166870/northcoast-coastal-sands-groundawter.pdf).

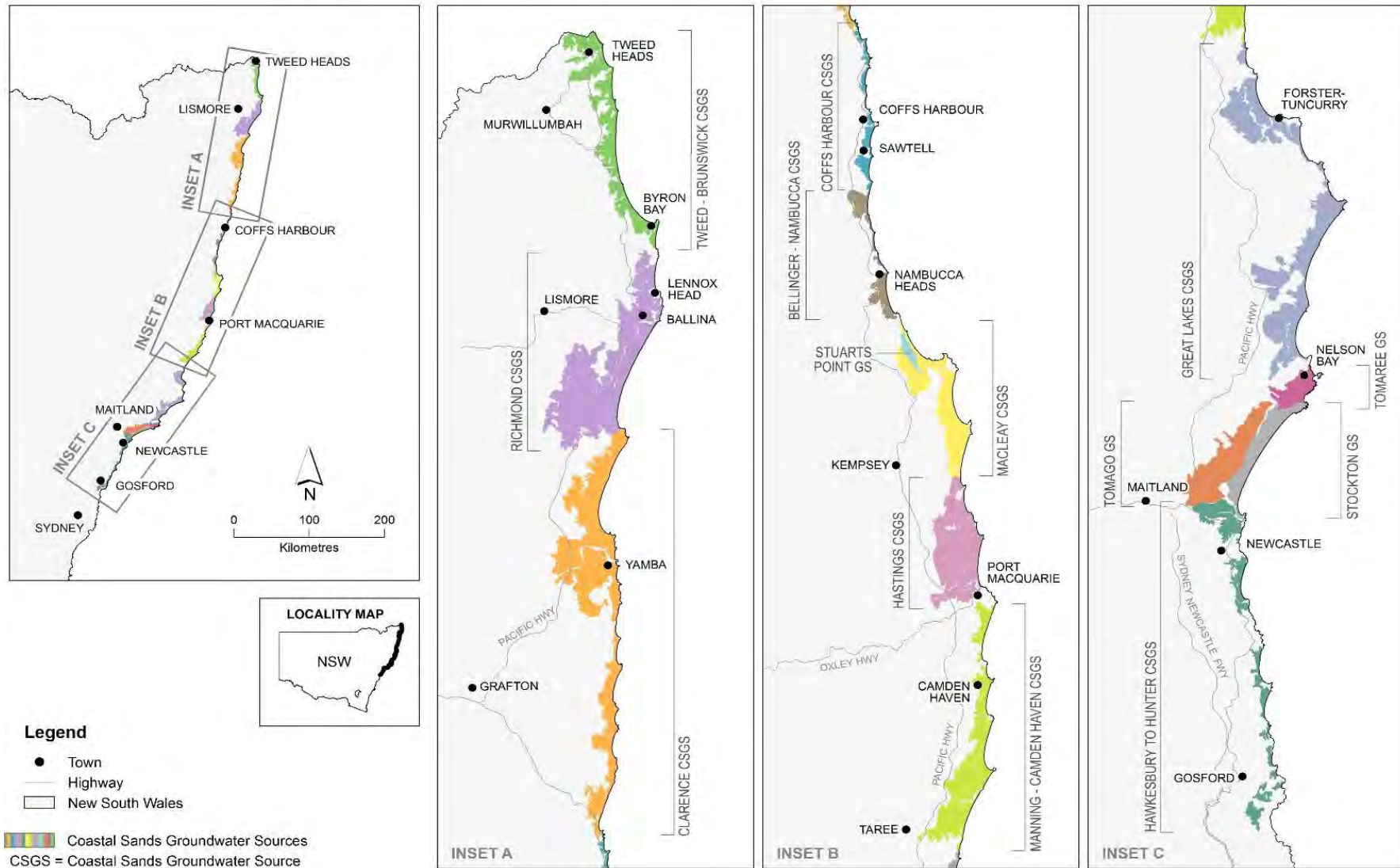
<sup>42</sup> *Ibid.*

The plan areas support a wide variety of primary industries, including beef cattle, dairy, horticulture, turf, forestry, fishing, tourism, and recreation. Residential, commercial and tourism development dominate the coastal fringe particularly on the far North Coast.<sup>43</sup> In the fractured and porous rock plan area, inland regions in the Hunter Valley also support major coal mining, power generation and viticulture industries.<sup>44</sup>

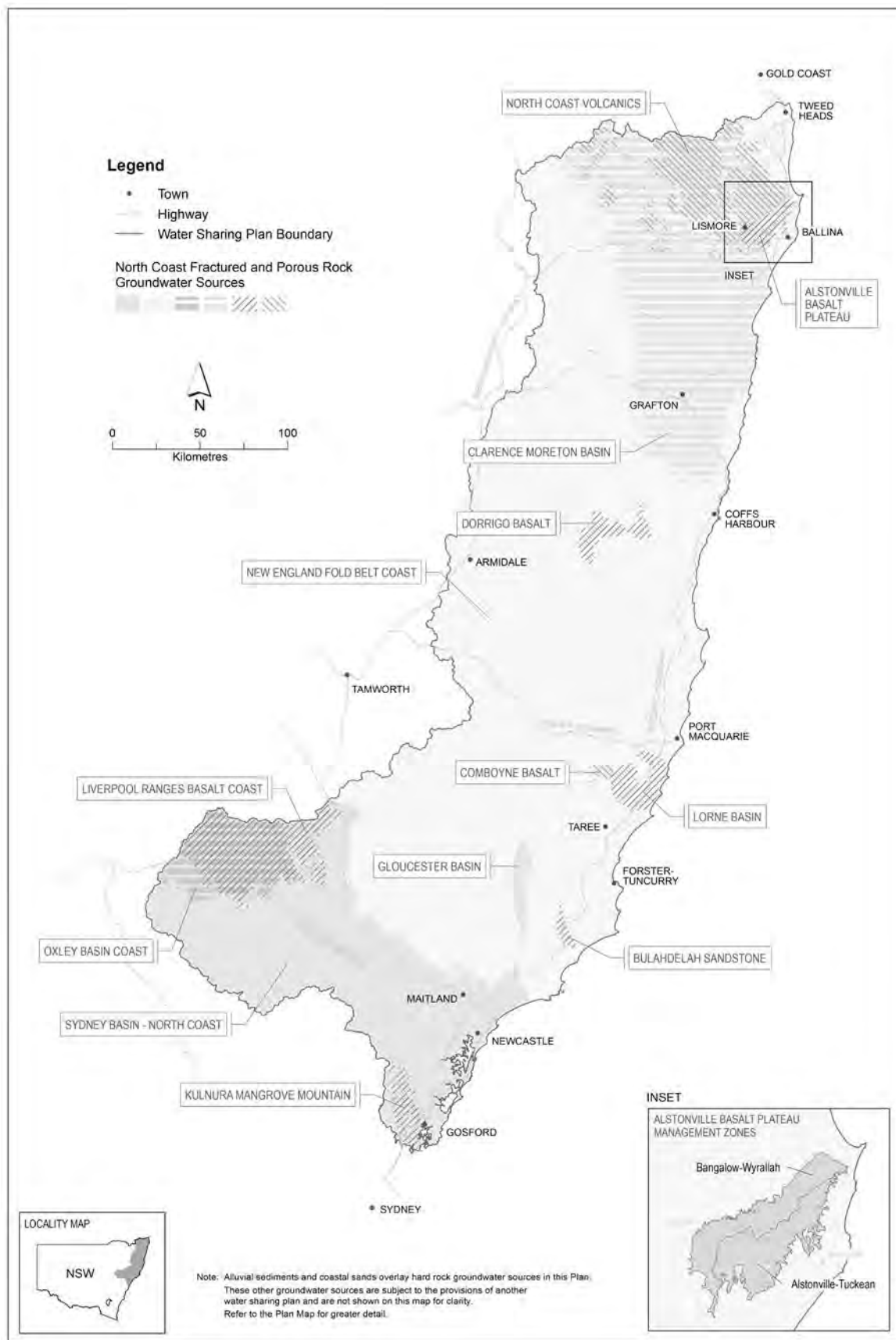
---

<sup>43</sup> *Ibid.*

<sup>44</sup> DPI-Water (2016) *Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources: Background document*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0004/166873/nth-coast-fractured-porous-rock-gw-background.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0004/166873/nth-coast-fractured-porous-rock-gw-background.pdf).



**Figure 2: Plan area maps for the Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources 2016** (Note: this map is sourced from the plan's background document and provides an overview only. The legal plan map can be found at [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au))



**Figure 3: Plan area maps for the Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016** (Note: this map is sourced from the plan’s background document and provides an overview only. The legal plan map can be found at [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au))

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

Findings and Observations	Recommendations
<b>Criterion 1 Finding: The relevant responsible parties have not implemented plan provisions relating to vision, objectives, strategies and performance indicators</b>	
<b>F 1</b> Provisions related to vision, objectives, strategies, and performance indicators under Part 2 of each plan were not implemented in the audit period for any of the plans.	<b>R 1</b> DPIE-Water to lead the monitoring and evaluation of performance indicators to measure the success of the strategies to reach the objectives set out in Part 2 of each plan and to use generated data to support decision making for plan implementation.
<b>O 1</b> There is no transparent reporting of plan performance in relation to progress towards achieving stated objectives.	<b>SA 1</b> DPIE-Water to publicly report on progress towards plan objectives.

### 5.1 Criterion overview

Part 2 of each plan is made in accordance with Section 35(1) 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 11 in the South Coast Plan
- Clause 12 in the North Coast Coastal Sands Plan
- Clause 12 in the North Coast Fractured and Porous Rock Plan

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.

### 5.3 Performance monitoring provisions have not been given effect to

#### DPIE-Water has not monitored or assessed performance indicators

While all three plans include provisions to satisfy this requirement of the Act, the relevant agencies have not implemented them during the audit period.<sup>45</sup>

DPIE-Water indicated that no active monitoring has been undertaken over the audit period and there is no formal assessment of performance indicators available. While some data relevant to some performance indicators are being collected for some water sources in the plan areas, this

<sup>45</sup> Note: there is no auditable provision in the plans that relates to achieving the vision. The vision is accepted as a statement in the plans, and it is assumed that the intent of the plan performance indicators clause is to achieve the vision through meeting the objectives.



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:

#### **5.4 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,<sup>46</sup> by the National Water Commission<sup>47</sup> and in Section 44 implementation audits undertaken in 2019 for other water sharing plans.<sup>48</sup>

#### **5.5 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).

#### **5.6 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.

---

<sup>46</sup> Natural Resources Commission (n.d.) *Water sharing plan reviews*. Available at: <https://www.nrc.nsw.gov.au/wsp-reviews>.

<sup>47</sup> 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>.

<sup>48</sup> 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>.

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.

## 5.7 Further opportunities to improve

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*<sup>49</sup> and in the NSW Government's *Water Reform Action Plan*.<sup>50</sup>

Data accessibility to support transparency is consistent with the NSW Government's *Open Data Policy*<sup>51</sup> 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*'.<sup>52</sup>

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

---

<sup>49</sup> 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/Mathews-interim-report-nsw-water.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0016/120193/Mathews-interim-report-nsw-water.pdf).

<sup>50</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0015/312144/nsw-government-water-reform-action-plan.pdf)

<sup>51</sup> 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>.

<sup>52</sup> DPIE-Water (n.d.) *Water*. Available at: <https://www.dpie.nsw.gov.au/our-work/water>.

## 6 Criterion 2 – Long-term average annual extraction limits

Findings and Observations	Recommendations
<p><b>Criterion 2 Finding: The relevant responsible parties have not implemented plan provisions relating to limits to the availability of water, specifically long-term average annual extraction limits</b></p>	
<p><b>F 2</b> Provisions related to limits to availability of water, specifically LTAAELs set out in Part 6 Division 1 of each plan (as required under clauses 26 and 27 of the South Coast Plan, clauses 28 and 29 of the North Coast Coastal Sands Plan and clauses 28 and 29 of the North Coast Fractured and Porous Rock Plan) were not implemented in any of the plans.</p>	<p><b>R 2</b> DPIE-Water to obtain reliable extraction data and use it to assess LTAAEL compliance for these three plans in accordance with Part 6 Division 1 of each plan.</p>
<p><b>O 2</b> Roles, systems and processes, including quality assurance for Long Term Average Annual Extraction Limit assessment and compliance work are not documented.</p>	<p><b>SA 2</b> DPIE-Water to document the roles, responsibilities, systems, processes and procedures relevant to Long Term Average Annual Extraction Limit management and compliance for coastal groundwater systems.</p>

### 6.1 Criterion overview

The purpose of Part 6 Division 1 in each plan is to set out how *'the availability of water for extraction in these groundwater sources on a long-term basis is to be managed'*.<sup>53</sup>

The plans include provisions that establish LTAAELs in accordance with the Act.<sup>54</sup> Clauses 24 to 27 in the South Coast Plan, clauses 25 to 29 in the North Coast Coastal Sands Plan, clauses 25 to 29 in the North Coast Fractured and Porous Rock Plan require:

- 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<sup>55</sup>
- 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.

<sup>53</sup> Clause 23 in the South Coast Plan, Clause 25 in North Coast Coastal Sands Plan, Clause 25 in the North Coast Fractured and Porous Rock Plan.

<sup>54</sup> 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.

<sup>55</sup> Note: in the North Coast Fractured and Porous Rock and North Coast Coastal Sands plans, the assessment for some groundwater sources is to commence in the first water year the plan has effect.

## 6.2 Current roles, systems and processes

DPIE-Water is responsible for implementing LTAAEL provisions in water sharing 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 groundwater 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.<sup>56</sup>

## 6.3 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 any of the three plans. DPIE-Water advised that there are currently no systems, processes and procedures in place to manage LTAAELs in these coastal groundwater plans.

DPIE-Water advised that delays in assessing extraction annually is partly due to a lack of resources to collect data on changes in water use, user behaviour and supply system management.

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

### **The absence of comprehensive and reliable extraction data mean current extraction levels cannot be calculated to support an assessment of LTAAEL 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 groundwater 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

---

<sup>56</sup> 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](https://www.waternsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf).

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.<sup>57</sup> 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.
- While mandatory conditions require water users to record their usage,<sup>58</sup> 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 8 (Criterion 4 - Granting access licences), Chapter 10 (Criterion 6 - Rules for water supply work approvals) and Chapter 12 (Criterion 8 - Mandatory Conditions)).

## 6.4 Potential impacts

By not implementing LTAAEL provisions, DPIE-Water cannot determine if extraction is sustainable or if extraction adjustments are required.

DPIE-Water staff advised that these coastal groundwater systems are not over-allocated and that therefore any water usage under access licences and basic landholder rights would likely be below the extraction limit. However, DPIE-Water staff did not provide information to support this assumption and so the auditor has no comment on whether the system is under or over allocated. In addition, there is very little data available showing actual take (see **Section 9.3**). DPIE-Water staff also acknowledged that they do not have data on compliance of individual licences and, as there is limited metering, they are unable to test whether water users are taking their entitlement.

Without extraction data or robust estimation methods the consequence of not managing LTAAELs in these systems is unknown.

## 6.5 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.<sup>59</sup>

---

<sup>57</sup> 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>.

<sup>58</sup> Mandatory conditions regarding keeping, recording, producing and retaining logbooks: Part 11, Clauses 50(2) and 51(2) of the South Coast Plan; Part 11, Clauses 55(2) and 56(2) of the North Coast Coastal Sands Plan; and Part 11, Clauses 55(2) and 56(2) of the North Coast Fractured and Porous Rock Plan.

<sup>59</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/312335/nsw-non-urban-water-metering-policy.pdf).

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.<sup>60</sup> The *NSW Non-Urban Water Metering Policy* states that the following infrastructure will not require meters:<sup>61</sup>

- water use from single bores with a diameter less than 200 millimetres
- multiple bores on the same licence below capacity thresholds<sup>62</sup>
- bores used solely for basic landholder rights.

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.<sup>63</sup>

This effectively means that LTAAEL compliance assessments will remain unable to be tested until these requirements come in 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. 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 groundwater sources.

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.

---

<sup>60</sup> Water use from bores with a diameter less than 200 millimetres or bores meeting basic landholder rights are not required to be metered, and access licence metering in coastal groundwater plans is not required until 1 December 2023. The Regulation requires smaller works to be metered in at-risk groundwater sources but there are no at-risk groundwater sources identified in the plans subject to this audit.

<sup>61</sup> *Ibid*, p. 4.

<sup>62</sup> Requirements for multiple pumps or multiple bores. The *NSW Non-Urban Water Metering Policy* states that 'users with multiple pumps or multiple bores permitted by the same authority, situated on the same landholding, or nominated on the same access licence, meet the threshold and are required to have meters on all their pumps or bores, unless they fall within an exception below: Groundwater bores where there are: of no more than 2 bores, each of which has a diameter less than 160 mm; no more than 3 bores, each of which has a diameter less than 130 mm; or no more than 4 bores, each of which has a diameter less than 120 mm.' (*Ibid*, p. 4).

<sup>63</sup> *Ibid*, p. 21.

## 6.6 Further opportunities to improve

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.

## 7 Criterion 3 – Available water determinations

Findings and Observations	Recommendations
<b>Criterion 3: The relevant responsible parties have partially implemented plan provisions relating to limits to the availability of water, specifically available water determinations</b>	
<p><b>F 3.1</b> Long Term Average Annual Extraction Limit compliance assessment was not undertaken (see F 2). This LTAAEL compliance assessment was therefore not considered in making Available Water Determinations for access licences as required by clauses 31 and 32 in the South Coast Plan, clauses 30 and 31 in the North Coast Coastal Sands Plan, and clauses 33 and 34 in the North Coast Fractured and Porous Rock Plan.</p> <p><b>F 3.2</b> In the first year (2016/17) of the South Coast Plan, Available Water Determinations applied to access licences in the Lachlan Fold Belt and Sydney Basin South Coast water sources were not made in accordance with the relevant Available Water Determination orders.</p>	<p><b>R 3.1</b> DPIE-Water to implement R 2 and use the Long Term Average Annual Extraction Limit compliance assessment to inform Available Water Determinations adjustments as required by Clause 27 of the South Coast Plan, Clause 29 of the North Coast Coastal Sands Plan and Clause 29 of the North Coast Fractured and Porous Rock Plan.</p>
<p><b>O 3</b> Procedures for determining Available Water Determination amounts in accordance with requirements set out in the Act and Regulation, including data requirements and methods appropriate for coastal groundwater systems, are not available.</p>	<p><b>SA 3</b> DPIE-Water to document the roles and responsibilities, systems, processes and procedures relevant to determining Available Water Determination amounts for coastal groundwater systems.</p>

### 7.1 Criterion overview

Provisions in the plans establish rules for Available Water Determinations (AWD), as required under sections 20(2)(b), 59 and 60 of the Act. Specifically, clauses 28 to 32 of the South Coast Plan, clauses 30 to 32 of the North Coast Coastal Sands Plan and clauses 30 to 34 of the North Coast Fractured and Porous Rock Plan set out these requirements.

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 two groundwater sources in the South Coast Plan. All plans have provisions for AWDs to be adjusted based on compliance with LTAAEL assessments, although this does not apply to all access licences types in the North Coast Fractured and Porous Rock Plan.

### 7.2 Current roles, systems and processes

DPIE-Water is responsible for preparing and issuing water allocation announcements, including AWDs and their associated orders, on 1 July of each water year and periodically throughout the year.<sup>64</sup> AWDs are given effect to by a statutory water order, which are published on DPIE-Water's website. The order authorises WaterNSW to credit the accounts of licensed water users with the

<sup>64</sup> DPIE-Water (n.d.) *Available Water Determinations*. Available at: <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/determinations>.



available water specified in the order.<sup>65</sup> It then allows licensed users to take that water in accordance with their account balance and license conditions.<sup>66</sup> DPIE-Water also 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 water sharing plan provisions (see **Chapter 6 - Criterion 2- Long term average annual extraction limits**).

WaterNSW is responsible for maintaining water allocation accounts for WALs.<sup>67</sup> 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. In addition, WaterNSW also publish water allocations and AWDs on the NSW Water Register.

### 7.3 Available Water Determination 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 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, no consideration was given to adjustments required under LTAAEL provisions (see **Criterion 2**). As discussed in **Chapter 6** (Criterion 2 - Long term average annual extraction limits), 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.

Due to the lack of metering in the plan areas (see **Chapter 6 - Criterion 2 - 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.<sup>68</sup>

DPIE-Water should obtain and use extraction data from the preceding three years to inform AWD as required by the plans. This process will require the LTAAEL provisions discussed in the assessment of **Criterion 2** to be given effect, specifically assessment of LTAAEL compliance (see **Chapter 6 - Criterion 2 - Long term average annual extraction limits**).

---

<sup>65</sup> DPIE-Water (n.d.) *Available Water Determinations*. Available at: <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/determinations>.

<sup>66</sup> *Ibid.*

<sup>67</sup> 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](https://www.waternsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf)

<sup>68</sup> Clauses 28-32 in the South Coast Plan, Clauses 30-32 in the North Coast Coastal Sands Plan, Clauses 30-34 in the North Coast Fractured and Porous Rock Plan.

## **WaterNSW correctly applied AWDs to accounts, except in the first year for the South Coast groundwater water sharing plan**

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

The 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 in the first year.

However, the Commission found inconsistencies in AWD listings for the Lachlan Fold Belt and Sydney Basin South Coast water sources during the first year of the South Coast Plan. For these water sources, the South Coast Plan provided for an AWD of 1.1 and 1.25 ML per unit share component respectively in the first year of the plan period.<sup>69</sup> However, the AWDs for aquifer access licences in these water sources are listed in the NSW Water Register as 1 ML per share component.<sup>70</sup>

This means that holders of WALs 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. This incident was considered to be a one-off occurrence and does not warrant a recommendation.

## **7.4 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.

## **7.5 Further opportunities to improve**

There are no documented procedures or methods for determining how an AWD amount is calculated under the plans. There is also no documentation of assumptions and available evidence to support the current approach to establishing AWDs. DPIE-Water provided a draft process document covering the preparation, approval and upload of resource assessments, briefs and orders to the records management system and website. However, this does not cover the role of hydrogeologists in the resource assessment team or actions specific to groundwater sources. It also does not describe how AWD amounts are determined for coastal groundwater systems.

Noting that DPIE-Water is currently documenting roles and other matters related to implementation program areas, it should ensure this process includes documentation of the roles and responsibilities, systems, processes and procedures relevant to determining AWD amounts for coastal groundwater systems.

---

<sup>69</sup> Clauses 31(2) and 31(5), respectively.

<sup>70</sup> WaterNSW (n.d.) *NSW Water Register*. Available at: <https://waterregister.waternsw.com.au/water-register-frame>.

## 8 Criterion 4 – Granting access licences

Findings and Observations	Recommendations
<b>Criterion 4 Finding: The relevant responsible parties have partially implemented plan provisions relating to granting access licences</b>	
<p><b>F 4.1</b> In the North Coast Fractured and Porous Rock Plan, mandatory conditions were not included in the Notice of Decision to WAL applicants in the audit period prior to 20 May 2020, as required to give effect to these conditions under sections 66A and 66(1A) of the Act.</p>	<p><b>R 4.1</b> WaterNSW to issue statements of conditions to water access licence holders inclusive of conditions.</p>
<p><b>F 4.2</b> There were gaps to requirements in water access licences converted from former entitlements under the <i>Water Act 1912</i>, including:</p> <ul style="list-style-type: none"> <li>- in the North Coast Fractured and Porous Rock Plan, water access licences were recorded in the Water Access Licence Register with errors relating to the plan and/or water source at plan commencement. Some work has been done to rectify this issue, but the current extent of this issue is unknown</li> <li>- in the North Coast Fractured and Porous Rock Plan, water access licence holders have not been notified of relevant conditions since plan commencement to give effect to Section 66(1A) of the Act</li> <li>- in the South Coast Plan and North Coast Coastal Sands Plan, water access licence holders did not receive written notice of the mandatory conditions until February 2018 (20 months after plan commencement), giving delayed effect to Section 66(1A) of the Act.</li> </ul>	<p><b>R 4.2</b> WaterNSW (with the support of the Natural Resources Access Regulator and DPIE-Water to lead an investigation into the incorrect conversion of water access licences in the North Coast Fractured and Porous Rock Plan and to carry out required communications with customers and Land Registry Services in relation to required changes to water access licences and water access licence conditions.</p> <p><b>R 4.1</b> also applies.</p>
<p><b>O 4.1</b> Mandatory conditions for North Coast Fractured and Porous Rock Plan are visible in the online NSW Water Register, even though they do not yet have effect under Section 66(1A) of the Act.</p>	<p><b>SA 4.1</b> WaterNSW to implement controls in the Water Licensing System so that only conditions that have been notified to water access licence holders appear on the NSW Water Register.</p>
<p><b>O 4.2</b> Formal guidance for determining controlled allocation volumes is not documented or transparent to stakeholders.</p>	<p><b>SA 4.2</b> DPIE-Water to formally document guidance for how the percent of unassigned water in a controlled allocation is determined. This should be externally reviewed by a groundwater specialist and made available to stakeholders.</p>

## 8.1 Criterion overview

Part 7 of each plan sets out the rules for granting WALs in accordance with the provisions of the Act and Clause 10 of the Regulation in relation to:

- granting a zero-share WAL applied for under Section 61(1)(b) of the Act<sup>71</sup>
- specific purpose access licences applied for under Section 61(1)(a) of the Act<sup>72</sup>
- granting of access licences applied for and granted under Section 61(1)(c) of the Act<sup>73</sup> 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), 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 orders)
- 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).
- Part 11 of the three plans, specifically that 'access licences in these groundwater sources must have mandatory conditions where required to give effect to the following'.

In relation to former water access entitlements converted at plan commencement the following were examined:

- Section 71B of the Act (giving effect to WALs through recording on WAL Register)
- Schedule 10 of the Act
- Clause 20(1) - requires notification of the terms
- Clause 20(2) - requires inclusion of mandatory conditions in the terms.
- Sections 67 (4) and (5) of the Act - requires notification of revised 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.

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.

---

<sup>71</sup> Clause 33 of the South Coast and North Coast Coastal Sands plans and Clause 35 of the North Coast Fractured and Porous Rock Plan.

<sup>72</sup> Clause 33 of the South Coast and North Coast Coastal Sands plans and Clause 35 of the North Coast Fractured and Porous Rock Plan.

<sup>73</sup> Clause 34 of the South Coast and North Coast Coastal Sands plans and Clause 36 of the North Coast Fractured and Porous Rock Plan.

## 8.2 Current roles, systems and processes

NRAR and WaterNSW are currently responsible for granting WALs. NRAR is responsible for public authorities,<sup>74</sup> 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 former entitlements under the *Water Act 1912* 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.<sup>75</sup> DPIE-Water organises controlled allocation orders, which are published in the NSW Government Gazette and announced on DPIE-Water's website.<sup>76</sup>

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 Licensing System (WLS) (this was previously the responsibility of NRAR from April 2018 and before that DPIE-Water predecessors). NRAR and WaterNSW are responsible for imposing mandatory conditions on licences.

WaterNSW and NRAR have systems and processes in place to implement the provisions of the three plans relating to granting of access licences. The main systems used to grant access licences are the:

- 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.<sup>77</sup>
- WAL Register – provides an online record of every WAL in NSW. Land Registry Services is responsible for operating and maintaining the WAL Register.<sup>78</sup>

---

<sup>74</sup> 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>).

<sup>75</sup> DPIE-Water (n.d.) *Controlled allocations*. Available at: <https://www.industry.nsw.gov.au/water/allocations-availability/controlled>.

<sup>76</sup> *Ibid.*

<sup>77</sup> WaterNSW (n.d.) *NSW Water Register*. Available at: <https://waterregister.watarnsw.com.au/water-register-frame>.

<sup>78</sup> Land Registry Services (n.d.) *Water Access Licence Register*. Available at: <https://www.nswlrs.com.au/Public-Register/WAL-Register>.

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 sheets – which set out the assessment process that is followed by WaterNSW and NRAR when determining whether to grant or decline an application.
- Strategy for controlled allocation of groundwater – provides a coordinated framework for making a controlled allocation; however, this document did not include guidance or a methodology in relation to determining whether there is sufficient water available to make a controlled allocation and if so, the appropriate volume. 79

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

### 8.3 Granting access licences provisions were partially implemented

#### Legislative provisions relating to granting water access licences were given effect, with some exceptions relating to mandatory conditions

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

This analysis found that the sampled access licences were generally compliant with the legislative requirements set out above, with the key exception that mandatory conditions had delayed implementation or were not implemented at all. Specific findings are set out below.

#### Some entitlements in the North Coast Fractured and Porous Rock Plan have been converted in error

For former entitlements under the *Water Act 1912*, in the North Coast Fractured and Porous Rock Plan, WALs were recorded in the WAL register with errors relating to plan and/or water source at plan commencement. Some work has been done to rectify this issue, but the current extent of this issue is not known.

WALs for holders of former entitlements under the *Water Act 1912* were converted in error. The extent of this issue is unknown by the agencies and was not able to be defined for the auditor. The auditor sighted some evidence in relation to work being done to resolve this issue in 2018, but ongoing arrangements to complete this work ceased until the present. The Commission understands work has recommenced in 2020 and this issue is soon to be resolved.

The Commission understands that the intent of WaterNSW is to resolve this issue as soon as practicable and to notify all WAL holders of their obligations once this work is complete.

Anecdotal evidence suggests that this occurred due to the complexity of the plan given its large geographic extent and multiple overlaying groundwater sources, as well as agency restructures.

---

<sup>79</sup> DPI- Water (2017) *Strategy for the controlled allocation of groundwater*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0005/159170/Strategy-for-the-controlled-allocation-of-groundwater.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0005/159170/Strategy-for-the-controlled-allocation-of-groundwater.pdf)

**WAL holders of WALs applied for and granted in the audit period in the North Coast Fractured and Porous Rock Plan area have not been notified of mandatory conditions to give effect to these conditions under Section 66A and 66(1A) of the Act**

In the North Coast Fractured and Porous Rock Plan, mandatory conditions were not included in the Notice of Decision to WAL applicants in the audit period prior to 20 May 2020, as required to give effect to these conditions under sections 66A and 66(1A) of the Act.<sup>80</sup>

DPIE-Water made mandatory conditions available to assessing officers in WaterNSW and NRAR on 20 May 2020 to use when granting licences. However, WaterNSW has not notified WAL holders granted WALs during the audit period of their obligations to date.

WaterNSW stated that WAL holders will be notified as soon as the conversion issued raised above has been resolved.

**WAL holders of converted former entitlements under the *Water Act 1912* in the North Coast Fractured and Porous Rock Plan have not been notified of relevant conditions since plan commencement as required by Schedule 10 clauses 20(1) and 20(2) and sections 67(4) and 67(5) of the Act (as applicable) to give effect to these conditions under Section 66A and 66(1A) of the Act**

Land Registry Services stated that that licence holders received written notice of the access licence certificate creation from Land Registry Services (and its predecessors), in relation to former entitlements under Schedule 10, Clause 20(1) of the Act. However, the 'terms of the licence' must include mandatory conditions in accordance with Section 66(1A) of the Act. Given the WAL certificate only refers to 'conditions statements available from WaterNSW' and does not detail these mandatory conditions, this aspect of WAL creation represents partial compliance with Schedule 10, clauses 20(1) and 20(2) of the Act.

DPIE-Water delayed making mandatory conditions available through the WLS to assessing officers in WaterNSW and NRAR to use to notify former holders of entitlements of their obligations until 20 May 2020. To date, WaterNSW has not notified WAL holders of former entitlements of their obligations.

**WAL holders of converted former entitlements in the South Coast and North Coast Coastal Sands plans were not notified of mandatory conditions for 20 months to give effect to these conditions under Section 66A and 66(1A) of the Act**

Land Registry Services stated that licence holders received written notice of the access licence certificate creation from Land Registry Services (and its predecessors), in relation to former entitlements under Schedule 10, Clause 20(1) of the Act. However, the 'terms of the licence' must include mandatory conditions in accordance with Section 66(1A) of the Act. Given the WAL certificate only refers to 'conditions statements available from WaterNSW' and does not detail these mandatory conditions, this aspect of WAL creation represents partial compliance with Schedule 10, clauses 20(1) and 20(2) of the Act.

The statement of conditions provided by WaterNSW to WAL holders in February 2018 gave full effect to Schedule 10, clause 20(1) and clause 20(2) and sections 67(4) and (5) of the Act (as applicable). However, this notification was delayed, occurring 20 months after plan commencement. As such, these access licences were operating unconditionally or under old WAL

---

<sup>80</sup> Section 66A of the Act states that a condition that is imposed takes effect on the day on which the licence takes effect. Section 66(1A) states that mandatory conditions do not have effect in relation to an access licence unless they are included in the terms of the licence.

conditions (as applicable) for the first 20 months of the audit period. WaterNSW advised that the delay in notification for the South Coast Plan and North Coast Coastal Sands Plan was due to agency restructures coinciding with plan commencement.

DPIE-Water delayed making mandatory conditions available through the WLS to officers in WaterNSW and NRAR. This meant that these conditions could not be used to notify former holders of entitlements of their obligations at plan commencement. These conditions became available to officers on 25 October 2017 and 23 January 2018 for the South Coast Plan and North Coast Coastal Sands Plan, respectively. This is when Notification of former entitlement holders became possible for WaterNSW.

There was no impact of delayed notification to WALs applied for and granted in the audit period (new entitlements) for these plans as all new entitlements were granted after these dates and notification of conditions occurred as required.

The Commission reviewed the risk of delayed notification going forward of any changes to mandatory conditions to existing WAL holders when the plans are remade. The Commission examined a sample of a notification provided to WAL holders for a recently remade water sharing plan. From this, and a schedule for notification for a range of recently remade plans, the Commission has confidence in the broader notification process going forward for new plans and does not consider these delays at plan commencement to be a problem for future plan remakes. As such, the Commission makes no recommendation.

## 8.4 Potential impacts

When WAL holders operate without conditions, they are not obligated to comply with the water sharing plan. In general, the key mandatory conditions applicable to the plans are related to:

- the obligation to keep a logbook to record take
- the obligation to comply with a maximum take limit.

Not including mandatory conditions in the terms of the WAL risks uncontrolled drawdown that may impact directly on neighbouring groundwater users (both licensed and operating under basic landholder rights) and the environment. Without mandatory conditions on WALs, 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.

## 8.5 Further opportunities to improve

### **Mandatory conditions for North Coast Fractured and Porous Rock Plan are visible in the online NSW Water Register, even though they do not yet have effect**

Mandatory conditions for the North Coast Fractured and Porous Rock Plan are visible in the online NSW Water Register even though they do not yet have effect. These conditions are also available on the NSW Water Register. As such, it appears to the public that associated mandatory conditions have been given effect under Section 66(1A) of the Act. However, given WAL holders have not yet been notified, these conditions do not yet have effect and these WAL holders are still operating unconditionally or to old WAL conditions (as applicable). This impacts transparency and may cause confusion for WAL holders.

### **Procedures and methodology to determine controlled allocation volumes are not transparent.**



It is noted that three controlled allocation orders were made in accordance with Section 65 of the Act:

- *Controlled Allocation Order (Various Groundwater Sources) 2017*<sup>81</sup>
- *Controlled Allocation Order (Various Groundwater Sources) 2018* (this Order amends the 2017 Order)<sup>82</sup>
- *Controlled Allocation Order (Various Groundwater Sources) 2020*.<sup>83</sup>

The underlying calculations of these controlled allocations orders were documented. The Strategy for the Controlled Allocation of Groundwater is available on the DPIE-Water website.<sup>84</sup> It documents the policy framework for decision making and outlines factors that are considered when determining the volumes to make available.

However, the process for determining the amount of each controlled allocation order and whether sufficient water exists to make a controlled allocation is not transparent or formally documented for coastal groundwater systems. DPIE-Water staff have provided informal internal documents to the Commission outlining the current processes and these documents describe the process of making controlled allocations. There is a controlled allocations working group that makes the decision on the percent of unassigned water to be released in each controlled allocations process. This process has an internal quality control check.

DPIE-Water staff indicated that the process follows a precautionary approach to protect the environment and other users. DPIE-Water staff also indicated that a review and analysis of the effect of each controlled allocations process is undertaken that informs the percent to be released (or withdrawal of groundwater source if close to 80 percent of LTAAEL) for each new controlled allocations process.

Whilst there is no explicit requirement for documenting and demonstrating sufficient water availability prior to making a controlled allocation, to do so would align with the objects and principles of the Act, which require sustainable management of water resources.<sup>85</sup>

Formal documentation of this process that is authorised and subject to formal document control processes would be beneficial. This process should be made available to stakeholders for transparency. The process documentation should include clear decision making parameters for how the percent of unassigned water is determined to ensure the process is repeatable, risks are managed, and the process is not open to interpretation by individuals. This process should be externally peer reviewed by a groundwater specialist to ensure it will withstand public scrutiny and ensure water is available without extraction exceeding sustainable levels.

---

<sup>81</sup> Government Gazette of the State of New South Wales Number 53 (2017) *Controlled Allocation Order 2017*. pp. 1623-1635. Available at: [https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette\\_2017\\_2017-53.pdf](https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette_2017_2017-53.pdf).

<sup>82</sup> Government Gazette of the State of New South Wales Number 59 (2018) *Controlled Allocation Order 2018*. pp. 3535 to 3536. Available at: [https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette\\_2018\\_2018-59.pdf](https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette_2018_2018-59.pdf).

<sup>83</sup> Government Gazette of the State of New South Wales Number 107 (2020) *Controlled Allocation Order 2020*. pp. 2132 to 2146. Available at: [https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette\\_2020\\_2020-107.pdf](https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette_2020_2020-107.pdf).

<sup>84</sup> DPI- Water (2017) *Strategy for the controlled allocation of groundwater*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0005/159170/Strategy-for-the-controlled-allocation-of-groundwater.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0005/159170/Strategy-for-the-controlled-allocation-of-groundwater.pdf)

<sup>85</sup> Sections 3 and 5 of the Act.

## 9 Criterion 5 – Managing access licences

Findings and Observations	Recommendations
<b>Criterion 5 Finding: The relevant responsible parties have partially implemented plan provisions relating to managing access licences</b>	
<p><b>F 5</b> While provisions relevant to each plan are set up in the Water Accounting System, comprehensive extraction data are not available to enable the management of individual accounts to ensure maximum allowable take is not exceeded in accordance with Part 8 of each plan.</p>	<p><b>R 5</b> 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 of each plan.</p>
<p><b>O 5</b> DPIE-Water participates in developing and reviewing the database configuration rules coded into the Water Accounting System, though this process is informal.</p>	<p><b>SA 5</b> 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.</p>

### 9.1 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 groundwater sources.

WaterNSW is responsible for administering water allocation accounts including the 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:<sup>86</sup>

- 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'*.

### 9.2 Current roles, systems and processes

DPIE-Water is responsible for setting standards and outputs (including policies) for water take measurement that are implemented by WaterNSW. DPIE-Water also determines water allocation through AWDs each year, which inform licensed water users how much water they can extract (see **Chapter 7** - Criterion 3 - Available water determinations).

The main systems used to manage access licences are the:

- **WAS** – operated and maintained by WaterNSW, this is used to apply water allocation account management rules to individual WAL accounts

<sup>86</sup> State of NSW (n.d.) *WaterNSW Operating Licence 2017-2022*. Available at: [https://www.watarnsw.com.au/\\_\\_data/assets/pdf\\_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf](https://www.watarnsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf)

- **iWAS** – this is a customer portal to the WAS, which allows customers to voluntarily report water take.<sup>87</sup>

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.

### 9.3 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 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. However, 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 Act<sup>88</sup> and the Regulation.<sup>89</sup>

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 information, which would enable them to comply with the access licence account management rules in Part 8 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:

---

<sup>87</sup> WaterNSW (n.d.) *Internet Water Accounting System (iWAS)*. Available at: <https://www.watnsw.com.au/customer-service/ordering-trading-and-pricing/ordering/iwas>.

<sup>88</sup> Section 85 of the Act.

<sup>89</sup> Clause 17 of the Regulation.

- 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 base<sup>90</sup>
- 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 8** - Criterion 4 - Granting Access Licences).

Despite having a procedure to determine water take, WaterNSW indicated that it currently does not have any designated staff in the groundwater coastal area 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 groundwater systems, the current limited metering coverage would not provide adequate data to support the water accounting requirements.

## 9.4 Potential impacts

Extraction limits for groundwater sources in the plans are based on the calculation of several key components, including groundwater recharge, risk assessment, planned environmental water, current and future water requirements.<sup>91</sup> 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 sustainable limits (LTAAELs) or not.

---

<sup>90</sup> WaterNSW (n.d.) *Groundwater Billing Calculator*. Available at: <https://www.waternsw.com.au/customer-service/ordering-trading-and-pricing/billing-calculators/groundwater-bill-calculator>

<sup>91</sup> DPIE-Water (2016) *Background document - Water Sharing Plan for North Coast Coastal Sands Groundwater Sources*. p.24. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0010/166870/northcoast-coastal-sands-groundawter.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/166870/northcoast-coastal-sands-groundawter.pdf).

## 9.5 DPIE-Water is improving water take information availability

From 1 December 2023 the *NSW Non-Urban Water Metering Policy* will require all works that take or may be used to take water (including wells, individual spear points and batteries of spears) to have a meter and report take monthly, with some exceptions (basic landholder rights bores and bores constructed under various circumstances with bore sizes generally less than 200 millimetres).<sup>92,93,94</sup>

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.

## 9.6 Further opportunities to improve

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. 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.

---

<sup>92</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/312335/nsw-non-urban-water-metering-policy.pdf).

<sup>93</sup> 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.

<sup>94</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/312335/nsw-non-urban-water-metering-policy.pdf).

## 10 Criterion 6 – Rules for water supply work approvals

Findings and Observations	Recommendations
<b>Criterion 6 Finding: The relevant responsible parties have partially implemented plan provisions relating to rules for water supply work approvals</b>	
<p><b>F 6.1</b> In the North Coast Fractured and Porous Rock Plan, mandatory conditions were not included in the Statement of Approval to supply work approval applicants in the audit period prior to 20 May 2020, as required to give effect to these conditions under sections 100A and 100(1A) of the Act.</p>	<p><b>R 6.1</b> WaterNSW to issue statements of approvals to water access licence holders inclusive of conditions.</p>
<p><b>F 6.2</b> There were gaps to requirements for supply work approvals converted from former entitlements under the <i>Water Act 1912</i>, including:</p> <ul style="list-style-type: none"><li>- in the North Coast Fractured and Porous Rock Plan, supply work approval holders have not been notified of relevant conditions since plan commencement as required by Schedule 10, clauses 20(1) and 20(2) of the Act.</li><li>- in the South Coast Plan and North Coast Coastal Sands Plan, supply work approval holders did not receive written notice of the mandatory conditions until February 2018 (20 months after plan commencement), giving delayed effect to Section 100(1A) of the Act.</li></ul>	<p><b>R 6.1</b> also applies</p>
<p><b>O 6</b> Mandatory conditions for North Coast Fractured and Porous Rock Plan are visible in the online NSW Water Register, even though they do not yet have effect under Section 100(1A) of the Act.</p>	<p><b>SA 6</b> WaterNSW to implement controls in the Water Licencing System so that only conditions that have been notified to supply work approval holders appear on the NSW Water Register.</p>

### 10.1 Criterion overview

Part 9 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 (matters for consideration in relation to granting approvals)
- Section 98 (notification of approval holders)
- Section 100 (imposing mandatory and discretionary conditions on approvals).

Provisions in the Act also establish rules for former entitlements:

- the conversion of former entitlements under the 1912 Water Act (Schedule 10, Clause 20(1) requiring notification of the terms and Clause 20(2) requiring inclusion of mandatory conditions in the terms)
- sections 102(4) and 102(5) of the Act, which requires 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.

## 10.2 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.<sup>95,96</sup> 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 three 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.<sup>97</sup> 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.

---

<sup>95</sup> 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](https://www.waternsw.com.au/__data/assets/pdf_file/0020/133940/Water-Roles-and-Responsibilities.pdf).

<sup>96</sup> NRAR (n.d.) *Licensing and approvals*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/licensing-and-approvals>.

<sup>97</sup> 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](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.

- 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.<sup>98</sup>
- **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.<sup>99</sup>

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.
- **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.<sup>100</sup>

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

---

<sup>98</sup> NRAR (n.d.) *Licensing and approvals*. Available at: <https://www.industry.nsw.gov.au/natural-resources-access-regulator/licensing-and-approvals>.

<sup>99</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0008/175931/Assessing-groundwater-applications-fact-sheet.pdf).

<sup>100</sup> WaterNSW (n.d) *NSW Water Register*. Available at: <https://waterregister.watarnsw.com.au/water-register-frame>.



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. The Commission has made some observations to strengthen these procedures in **Section 10.5**.

### **10.3 Rules for water supply work approvals were partially implemented**

#### **Legislative provisions relating to water supply work approvals were given effect, with some exceptions relating to mandatory conditions**

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.

This analysis found that the sampled water supply work approvals were generally compliant with the legislative requirements set out above, with the key exception that mandatory conditions had delayed implementation or were not implemented at all. Specific findings are set out below.

#### **In North Coast Fractured and Porous Rock Plan, mandatory conditions were not included in the Statement of Approval to water supply work approval applicants in the audit period prior to 20 May 2020, as required to give effect to these conditions under sections 100A and 100(1A) of the Act**

None of the sample access licences granted by WaterNSW in the audit period had the mandatory conditions included in the Statement of Approval, except those granted after 20 May 2020.

DPIE-Water made mandatory conditions available to assessing officers in WaterNSW and NRAR on 20 May 2020 to use when granting supply work approvals. However, WaterNSW has not notified WAL holders of pre-existing WALs of their obligations to date.

WaterNSW has stated that WAL holders will be notified as soon as the conversion issued raised above has been resolved.

#### **For former entitlements under the *Water Act 1912*, in the North Coast Fractured and Porous Rock Plan, supply work approval holders have not been notified of relevant conditions since plan commencement as required by Schedule 10, clauses 20(1) and 20(2) and sections 102(4) and 102(5) of the Act (as applicable) to give effect to Section 100(1A) of the Act.**

DPIE-Water made mandatory conditions available through the WLS to assessing officers in WaterNSW and NRAR on 20 May 2020 to use to notify former holders of entitlements of their obligations. However, WaterNSW has not notified existing water supply work approval holders of their obligations to date. There have been 1,706 approvals in the North Coast Fractured and Porous Rock Plan in the audit period prior to 20 May 2020.

#### **In the South Coast Plan and North Coast Coastal Sands Plan, mandatory conditions were given delayed effect under Section 100(1A) of the Act for water supply work approvals**

In the South Coast Plan and North Coast Coastal Sands Plan, water supply work approval holders did not receive written notice of the mandatory conditions until February 2018 (20 months after plan commencement), giving delayed effect to Schedule 10, clauses 20(1) and 20(2) and Sections 102(4) and 102(5) of the Act respectively.

Licensees received a statement of mandatory conditions in February 2018 (20 months after plan commencement and therefore these requirements were not given effect until this time). As such, these access licences were operating unconditionally for the first 20 months of the audit period.

WaterNSW advised that the delay in notification for the South Coast Plan and North Coast Coastal Sands Plan was due to agency restructures coinciding with plan commencement.

Mandatory conditions were not entered into the WLS for assessing officers in NRAR and WaterNSW to use when notifying licensees of their obligations, until 25 October 2017 and 23 January 2018 for the South Coast Plan and North Coast Coastal Sands Plan, respectively.

This means that any notification provided by WaterNSW to holders of former entitlements would not have been able to include mandatory conditions if it were provided any earlier than these two dates. There have been 130 approvals granted in the North Coast Coastal Sands Plan prior to 23 January 2018 and 1,552 in the South Coast Plan prior to 25 October 2017.

## 10.4 Potential impacts

When water supply work approval holders operate without conditions, they are not obligated to comply with the water sharing plan. In general, the key mandatory conditions applicable to the plans are related to:

- the obligation to keep a logbook to record take
- the obligation to comply with minimum construction requirements
- the obligation to comply with metering requirements (as required).

Not including mandatory conditions in the terms of the water supply work approval risks uncontrolled 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 on water supply work approvals, 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.

## 10.5 Further opportunities to improve

Although considered adequate to implement plan provisions, the Commission considers that the Licensing Procedure Manual should be updated to reflect current agency and regulatory roles. The Licensing Procedure Manual is the key guidance document, which in all material respects provides adequate guidance for assessing water supply works approvals in line with the Act, and Regulation and plan rules. However, this procedure has not been updated since 2014 and does not reflect contemporary agency roles or names and still refers to the *Water Management (General) Regulation 2011*.<sup>101, 102</sup> These observations are not material to the processing of water supply works approvals, and are not urgent and should be carried out as part of the planned procedure reviews for each organisation. The Commission notes that NRAR and WaterNSW indicated they are reviewing and updating all assessment processes and procedures as part of developing and maintaining a quality management system. Therefore, no suggested action has been raised as part of this audit.

<sup>101</sup> The Regulatory Impact Statement concerning the *Water Management (General Regulation) 2018* tables the changes to the Regulation, these changes stated are not material to the approvals process.

<sup>102</sup> Department of Industry (2018) *Water Management (General) Regulation 2018 – Regulatory impact statement*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0019/172081/Regulatory-Impact-Statement.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0019/172081/Regulatory-Impact-Statement.pdf).

## 11 Criterion 7 – Access licence dealing rules

Findings and Observations	Recommendations
<b>Criterion 7 Finding: The relevant responsible parties have implemented plan provisions relating to access licence dealing rules</b>	
<b>O 7.1</b> The NSW Water Register contains dealing related information which is incomplete and uses old terminology.	<b>SA 7.1</b> WaterNSW to increase the accuracy and extent of the dealings, information available the NSW Water Register for improved transparency.
<b>O 7.2</b> DPIE-Water participates in developing and reviewing the database configuration rules coded into the Water Accounting System for dealings, though this process is informal.	

### 11.1 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*<sup>103</sup>
- clauses 12 and 22 of the Regulation
- Part 10 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).

<sup>103</sup> 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>.

## 11.2 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, 71U, 71T and 71V and 71W of the Act.<sup>104</sup>
- **Land Registry Services** – responsible for maintaining the WAL Register on behalf of the Minister administering the Act;<sup>105, 106, 107</sup> registering general WAL dealings on the WAL Register (WAL dealings only take effect when registered);<sup>108</sup> printing and issuing WAL certificates;<sup>109</sup> 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 received from both WaterNSW and the applicant.<sup>110</sup>

- **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.<sup>111</sup> 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.

---

<sup>104</sup> 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](https://www.waternsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf).

<sup>105</sup> Land Registry Services (n.d.) *Water Access Licence Register*. Available at: <https://www.nswlrs.com.au/Public-Register/WAL-Register>.

<sup>106</sup> 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>).

<sup>107</sup> Division 3A of the Act states what must be recorded in the WAL Register, including dealings and other matters.

<sup>108</sup> WaterNSW (n.d.) *Dealings and Trade*. Available at: <https://www.waternsw.com.au/customer-service/water-licensing/dealings-and-trade>.

<sup>109</sup> Land Registry Services (n.d.) *Water Access Licence Register*. Available at: <https://www.nswlrs.com.au/Public-Register/WAL-Register>.

<sup>110</sup> *Ibid.*

<sup>111</sup> WaterNSW (n.d.) *Water Accounting System*. Available at: <https://www.waternsw.com.au/customer-service/ordering-trading-and-pricing/ordering/WAS>.

- 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.

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.<sup>112</sup> 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. The Commission has made some observations to strengthen these procedures in **Section 11.4**.

### 11.3 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.

---

<sup>112</sup> WaterNSW (n.d) *Water Dealings and Trade – dealings process*. Available at: <https://www.watnsw.com.au/customer-service/water-licensing/dealings-and-trade/dealings-process>.

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 **Table 3**.

**Table 3: Summary of plan activity related to access licence dealing rules**

Plan	Findings
<b>North Coast Coastal Sands</b>	Assignment of rights dealings under Section 71Q of the Act were processed in accordance with Part 10, Clause 49 of the plan
	Assignment of water allocations dealings under Section 71T of the Act occurred in accordance with Part 10, Clause 51 of the plan
	Nomination of water supply works dealings under Section 71W of the Act was processed in accordance with Part 10, Clause 53 of the plan
	Prohibited dealings types under sections 71O, 71R, 71U and 71V of the Act did not occur during the audit period, in accordance with Part 10, clauses 48, 50 and 52 of the plan, respectively
<b>North Coast Fractured and Porous Rock</b>	No dealings occurred under sections 71N, 71P, 71QA and 71S 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 48 of the plan
	Assignment of water allocations dealings under Section 71T of the Act occurred in accordance with Part 10, Clause 51 of the plan
	Nomination of water supply works dealings under Section 71W were processed in accordance with Part 10, Clause 53 of the plan
	Prohibited dealings types under sections 71O and 71R of the Act did not occur during the audit period, in accordance with Part 10, Clause 47 of the plan
<b>South Coast</b>	No dealings occurred under sections 71N, 71P, 71S and 71QA of the Act, so could not be tested
	Assignment of rights dealings under Section 71Q of the Act occurred in accordance with Part 10, Clause 43 of the plan
	Prohibited dealings types under sections 71O, 71R and 71T of the Act did not occur during the audit period (in accordance with Part 10, clauses 44, 45, 46 of the plan, respectively)
<b>South Coast</b>	No dealings occurred under sections 71W, 71N, 71P, 71QA and 71S, so these could not be tested

## 11.4 Further opportunities to improve

Although considered adequate to implement plan provisions, the Commission identified several aspects of the systems and processes used to administer dealings that could be improved:

- 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.<sup>52</sup> 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.

- The Licensing Procedure Manual needs updating to reflect contemporary arrangements. Specifically, the manual:
  - is outdated and refers to agencies that no longer exist
  - refers to the *Water Management (General) Regulation 2011*, which has been replaced and is no longer legally enforceable.

The Commission does not consider these issues pose material risks to the implementation of this criterion. Therefore, no suggested action has been raised as part of this audit. However, to reduce confusion WaterNSW should update the Licensing Procedure Manual as part of the planned procedure update process so it reflects the current operating environment, roles and responsibilities and refer to the *Water Management (General) Regulation 2018*.

- 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 rules. 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.

## 12 Criterion 8 – Mandatory conditions

Findings and Observations	Recommendations
<p><b>Criterion 8 Finding: The relevant responsible parties have partially implemented plan provisions relating to mandatory conditions</b></p> <p><b>F 8</b> Mandatory conditions for bore construction intended to minimise environmental harm were not included on water supply work approvals in accordance with Part 11, Clause 56(1) of the North Coast Fractured and Porous Rock Plan, Clause 51(1) of the South Coast Coastal Sands Plan and Clause 56(1) of the North Coast Coastal Sands Plan.</p> <p><i>Note that F 4.1, F 4.2, F 6.1 and F 6.2 (and associated recommendations) are also relevant to this Criterion – these findings relate to mandatory conditions being delayed in being given effect due to a lack of or delayed notification.</i></p>	<p><b>R 8</b> DPIE-Water to review water licencing system coding and associated application processes to ensure mandatory conditions for bore construction in accordance with Part 11, Clause 56(1) of the North Coast Fractured and Porous Rock Plan, Clause 51(1) of the South Coast Coastal Sands Plan and Clause 56(1) of the North Coast Coastal Sands Plan are applied to all water supply work approvals going forward.</p>

### 12.1 Criterion overview

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

- Mandatory conditions for access licences<sup>113</sup> generally relate to account management such as carryover entitlements, rules relating to access of water, notification of breaches, and keeping of logbooks:
  - South Coast Plan, clauses 50(1) to 50(5)
  - North Coast Coastal Sands Plan, clauses 55(1) to 55(4)
  - North Coast Fractured and Porous Rock Plan, clauses 55(1) to 55(4).
- Mandatory conditions for water supply work approvals<sup>114</sup> generally relate to rules for appropriate installation of works in accordance with Australian bore guidelines and ensuring appropriate construction to prevent contamination between aquifers and minimise environmental harm:
  - South Coast Plan, clauses 51(1) to 51(6)
  - North Coast Coastal Sands Plan, clauses 56(1) to (7)
  - North Coast Fractured and Porous Rock Plan, clauses 56(1) to (6)

Enforcement requirements are set out in the Act, specifically:

- Part 2 Division 1A, sections 61A to 60I (Offences relating to WALs)

<sup>113</sup> Clause 50 in the South Coast Plan, Clause 55 in the North Coast Coastal Sands Plan, Clause 55 in the North Coast Fractured Rock Plan.

<sup>114</sup> Clause 51 in the South Coast Plan, Clause 56 in the North Coast Coastal Sands Plan, Clause 56 in the North Coast Fractured Rock Plan.



- Part 3 Division 1A, sections 91A to 91N (Offences relating to water supply work approvals)<sup>115</sup>
- Section 78 (WAL suspension)
- Chapter 7 (enforcement for example stop work orders, removal of unlawful water management works).

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 8** (Criterion 4 - Granting access licences) and **Chapter 10** (Criterion 6 - Rules for water supply work approvals). In particular, the assessment of Criterion 4 and Criterion 6 found that notification of mandatory conditions had been delayed or had not occurred in the plan areas, meaning the provisions were not given effect or were given delayed effect.

Recognising that mandatory conditions were largely not given effect due to this, 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.

## 12.2 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 66(1)<sup>116</sup> and 100<sup>117</sup> of the Act for its customers.<sup>118</sup>

---

<sup>115</sup> Note that offences under sections 91B, 91C, 91C, 91D and 91E of the Act are not relevant to the plans.

<sup>116</sup> State of NSW (n.d.) *WaterNSW Operating Licence. 2017-2022*, p. 41. Available at: [https://www.watnsw.com.au/\\_\\_data/assets/pdf\\_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf](https://www.watnsw.com.au/__data/assets/pdf_file/0004/126607/July-2020-WaterNSW-Operating-Licence.pdf).

<sup>117</sup> *Ibid*, p. 53.

<sup>118</sup> 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.

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(2) 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.
- **Compliance Investigation Reporting and Management System (CIRaM)** – used by NRAR for compliance purposes.

The Licensing Procedure Manual is used to implement 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. The Commission has made some observations to strengthen these procedures in **Section 0**.

### 12.3 Rules for mandatory conditions have been partially implemented

#### **Mandatory conditions provisions were accurately translated to WALs and approvals except for those relating to bore construction.**

To assess if plan provisions were given effect, the Commission sampled a range of WALs and water supply work approvals of both converted former 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 around keeping logbooks and reporting, and water allocation account management rules.

There was one broad exception to this, where standards and requirements intended to minimise environmental harm outlined in the plans related to bore construction were not included in mandatory requirements. Material requirements that were not included to an adequate extent in the mandatory conditions of enough approvals to be considered a material issue include:

- requirements to apply screening from other water sources (South Coast Plan Clause 51(1)(c); North Coast Coastal Sands Plan and North Coast Fractured and Porous Rock Plan Clause 56(1)(c)(i))
- requirements for construction to adhere to the *Minimum Construction Requirements for Water Bores in Australia 2012* – noting that the guidelines were updated in 2020 (South Coast Plan Clause 51(1)(d)(ii); North Coast Coastal Sands Plan and North Coast Fractured and Porous Rock Plan Clause 56(1)(d)(ii)).<sup>119</sup>
- requirements that works is constructed to prevent contamination between aquifers (South Coast Plan Clause 51(1)(d)(iii); North Coast Coastal Sands Plan and North Coast Fractured and Porous Rock Plan Clause 56(1)(d)(iii))
- requirement to notify the Minister upon completion of the installation of the water supply work (South Coast Plan Clause 51(g), North Coast Coastal Sands Plan Clause 51(j))<sup>120</sup>
- requirement to ensure contaminated water is excluded from the water supply work (South Coast Plan Clause 51(1)(h)(iii), North Coast Coastal Sands Plan Clause 56(1)(k)(iii), North Coast Fractured and Porous Rock Clause 56(1)(j)(iii)).

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.

<sup>119</sup> National Uniform Driller Licensing Committee (2012) *Minimum Construction Requirements for Water Bores in Australia, Third Edition*. Available at: [https://www.water.wa.gov.au/\\_\\_data/assets/pdf\\_file/0005/1796/Minimum-construction-guidelines-for-water-bores-in-Australia-V3.pdf](https://www.water.wa.gov.au/__data/assets/pdf_file/0005/1796/Minimum-construction-guidelines-for-water-bores-in-Australia-V3.pdf); National Uniform Driller Licensing Committee (2020) *Minimum Construction Requirements for Water Bores in Australia, Fourth Edition*. Available at: <https://www.adia.com.au/documents/item/458>.

<sup>120</sup> This clause was not included in the North Coast Fractured and Porous Rock 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.

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.

Given these requirements are intended to protect environmental values, failure to include them in mandatory conditions may risk material harm to the environment, noting that some bore construction requirements will also apply under bore drillers' licensing under section 118A of the Water Act 1912.

DPIE-Water should review WLS coding to ensure mandatory conditions for bore construction in accordance with Part 11 Clause 56(1) of the North Coast Fractured and Porous Rock Plan, Clause 51(1) of the South Coast Coastal Sands Plan and Clause 56(1) of the North Coast Coastal Sands Plan are applied to all water supply work approvals going forward.

The Commission also found that, while statements of approval in the South Coast Plan did not consistently include a detailed description of the works (for example, exact bore location, pump size, pipe size, and bore diameter), this information is held on the WLS allowing enforcement of unlawful work.

### **A reactive compliance and enforcement regime is in place**

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

- Monitoring of offenses 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 section 78 and 78A and Chapter 7 of the Act.
- Monitoring of offenses 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.<sup>121</sup> 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.<sup>122</sup>

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*.<sup>123</sup>

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

---

<sup>121</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0020/227324/NRARs-regulatory-priorities-2019-to-2021.pdf).

<sup>122</sup> *Ibid.*

<sup>123</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0005/335363/NRAR-Strategic-Plan-2021-23.pdf).

- 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.<sup>124, 125</sup>

Prior to the establishment of NRAR, concerns around compliance resourcing and standards across NSW had been raised by the NSW Ombudsman.<sup>126, 127</sup> 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.<sup>128, 129</sup> 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.<sup>130</sup>

Being coastal groundwater 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 in these plan areas, however at this time there is no specific compliance information available to inform the audit. The plans are currently subject to a reactive compliance regime and NRAR has reported since 2018 on compliance activity within these plan areas:

- South Coast Plan compliance activity was not listed in NRAR public reports since NRAR's commencement in April 2018 to August 2019.<sup>131</sup> Available data shown in
- **Table 4** indicates enforcement activity from September 2019 to April 2020. NRAR staff indicated that public reporting processes prior to August 2019 were that plans with no compliance activity were not listed in the public report. This has now changed and all plans are listed in these reports regardless of the level of compliance activity.
- North Coast Fractured and Porous Rock Plan compliance activity was listed in these public reports since NRAR's commencement in April 2018 (noting a gap in October – December 2018).<sup>132</sup> Available data shown in
- **Table 4** indicates enforcement activity from April 2018 through to April 2020.

---

<sup>124</sup> 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>.

<sup>125</sup> NRAR (2019) *NRAR Regulatory Policy*. Available at: [https://www.industry.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0003/144039/NRAR-Regulatory-policy.pdf](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0003/144039/NRAR-Regulatory-policy.pdf)

<sup>126</sup> 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](https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0012/50133/Investigation-into-water-compliance-and-enforcement-2007-17.pdf).

<sup>127</sup> 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](https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0006/57903/Water-compliance-and-enforcement-a-special-report.pdf).

<sup>128</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0011/227378/NRAR-compliance-outcomes-2018-compared-with-2017.pdf).

<sup>129</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0007/272689/NRAR-progress-report-2018-19.pdf).

<sup>130</sup> 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](https://www.industry.nsw.gov.au/__data/assets/pdf_file/0011/227378/NRAR-compliance-outcomes-2018-compared-with-2017.pdf).

<sup>131</sup> 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>.

<sup>132</sup> *Ibid.*

- North Coast Coastal Sands Plan was listed in these public reports since NRAR’s commencement in April 2018 (noting a gap in October – December 2018). Available data shown in
- **Table 4** indicates enforcement activity from April 2018 through to April 2020.

**Table 4: Publicly reported enforcement activity relevant to the audit period<sup>133</sup>**

	North Coast Plan (April 2018-April 2020)	North Coast Fractured and Porous Rock Plan (April 2018-April 2020)	South Coast Plan (September 2019 to April 2020)
<b>Inspections</b>	1	11	0
<b>Alleged breach notifications</b>	14	38	4
<b>Investigations finalised</b>	8	20	3
<b>Advisory letters issued</b>	1	4	0
<b>Formal warnings</b>	1	0	0
<b>Statutory notices</b>	0	4	0
<b>PINs</b>	0	2	0
<b>Prosecutions finalised</b>	0	0	0

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.

## 12.4 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.

<sup>133</sup> This audit did not seek to establish the quality of the enforcement regime and how these incidents were finalised.

## 12.5 Further opportunities to improve

Although considered adequate to implement plan provisions, the Commission identified several aspects of the systems and processes used to implement mandatory conditions that could be improved:

- As mentioned in previous chapters, the Licensing Procedure Manual used throughout the audit period is outdated (dated pre-audit period) and refers to agencies that no longer exist such as Land and Property Information, which is now Land Registry Services. However, it is accurate with respect to mandatory conditions and notification requirements, and the roles of agencies is understood, so these discrepancies are considered immaterial. The Commission considers it was adequate for the purposes of applying mandatory conditions and acknowledges that WaterNSW and NRAR staff have indicated they are in the process of updating the manual. Therefore, no suggested action has been raised as part of this audit.
- In cases where there are no mandatory conditions in the system, it does not appear that WaterNSW alert DPIE-Water to put a hold on the approval being granted. For example, approvals have been granted under the North Coast Fractured and Porous Rock Plan, without any mandatory conditions. The Commission is not aware that this is a systemic issue. Given this is potentially only relevant to this one plan, soon to be resolved, no suggested action has been raised.
- WaterNSW staff indicated that WAL holders currently do not receive a statement of conditions that includes the WAL number once a new WAL is created in the WAL register. Instead, new WAL holders must match the notice of decision with a WLS reference number to the WAL certificate provided by Land Registry Services with the WAL number to understand the conditions. It makes it difficult for the WAL holder (especially for holders of multiple WALs and water supply work approvals) to understand the conditions which apply to a particular WAL and risks conditions being missed or misunderstood. It would be more straightforward for licence and approval holders if a subsequent statement of conditions inclusive of the WAL number was provided to WAL holders or if the WAL certificate included the statement of conditions. The Commission has not investigated from a stakeholder point of view whether this potential confusion is a real issue for WAL or approval holders. Therefore, the Commission has not made a suggested action as the cost benefit is not clear, given re-issuing statements of conditions is costly and this is not currently part of the IPART determination funding arrangements.

## 13 Criterion 9 – Amendments

Findings and Observations	Recommendations
<p><b>Criterion 9 Finding: The relevant responsible parties have implemented plan provisions relating to amendments (where these are not optional), but there is no evidence that identified amendments (which may include optional amendments) have been given due consideration</b></p>	
<p><b>F 9</b> Due consideration has not been given to non-mandatory amendments set out in Part 12 of each plan.</p>	<p><b>R 9</b> DPIE-Water to formalise and implement a process to:</p> <ul style="list-style-type: none"> <li>- document the decision-making process underpinning if and how to implement potential amendment provisions</li> <li>- document the status of potential amendment provisions.</li> </ul>
<p><b>O 9.1</b> The North Coast Coastal Sands and North Coast Fractured and Porous Rock plans have not been amended to acknowledge native title determinations that have occurred in the audit period.</p>	<p><b>SA 9.1.</b> Amend the North Coast Coastal Sands and North Coast Fractured Rock plans to reflect current native title determinations.</p>
<p><b>O 9.2</b> The plans refer to an outdated version of the minimum construction requirements for water bores in Australia.</p>	<p><b>SA 9.2</b> Amend plan provisions to reflect current guidelines for water bores in Australia.</p>

### 13.1 Criterion overview

Section 45(1) of the Act allows for water sharing plans to be amended under specific conditions. Part 12 of each plan 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.

### 13.2 Current roles, systems and processes

DPIE-Water is responsible for implementing amendment provisions and updating plans as required under Section 42 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.



### 13.3 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 related to provisions that are currently not being implemented (such as LTAAEL provisions), those related to licences or activities that do not exist in the plan areas (such as Aboriginal community development licences and managed aquifer recharge), or those applicable after Year 5 of a plan, which is outside the audit period.

However, some potentially relevant amendments were identified, which should have led to plan updates. Two examples are highlighted below:

- The North Coast Coastal Sands and North Coast Fractured and Porous Rock plans have not been amended to acknowledge native title determinations that have occurred in the audit period.<sup>134</sup> Both plans had two native title determinations made during the audit period.<sup>135, 136, 137, 138, 139</sup> 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 the way Clause 20 in the North Coast Coastal Sands 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

---

<sup>134</sup> Clause 62(3) of the South Coast Plan, Clause 67(3) of the North Coast Fractured and Porous Rock Plan, Clause 67(3) of the North Coast Coastal Sands Plan all provide that 'this Plan may be amended following the granting of a native title claim pursuant to the provisions of the Native Title Act 1993 of the Commonwealth to give effect to an entitlement granted under that claim'.

<sup>135</sup> Note that in the North Coast Fractured and Porous Rock Plan there were four determinations that came into effect before the audit period commenced. These determinations were not acknowledged in the plan at plan commencement in Clause 19.

<sup>136</sup> The first North Coast Coastal Sands Plan determination: NSD6020/2001 - Bundjalung People of Byron Bay #3 which includes the right to '5(c) take and use the water for personal, domestic and communal purposes (including cultural purposes)...' (effective 20 May 2020). Reference: National Native Title Tribunal. National Native Title Register Details. 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](http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/Pages/NNTR_details.aspx?NNTT_Fileno=NCD2019/001).

<sup>137</sup> The second North Coast Coastal Sands Plan determination: NSD1350/2016 - Gumbaynggirr People #3 - which includes the right to '5(b) take and use waters on or in the Native Title Area...' (effective 26 November 2019). Reference: National Native Title Tribunal. National Native Title Register Details NCD2019/002 - Gumbaynggirr People #3. Available at: [http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/NNTR%20Extracts/NCD2019\\_002/NNTRExtract\\_NCD2019\\_002.pdf](http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/NNTR%20Extracts/NCD2019_002/NNTRExtract_NCD2019_002.pdf).

<sup>138</sup> The first North Coast Fractured and Porous Rock Plan determination: NSD2300/2011 - Western Bundjalung People Part A which includes the right to '5(c) take and use the water for personal, domestic and communal purposes( including cultural purposes)...' (effective 12 July 2018). Reference: National Native Title Tribunal. National Native Title Register Details NCD 2017002 - Western Bundjalung People Part A. Available at: [http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/NNTR%20Extracts/NCD2017\\_002/NNTRExtract\\_NCD2017\\_002.pdf](http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/NNTR%20Extracts/NCD2017_002/NNTRExtract_NCD2017_002.pdf).

<sup>139</sup> The second North Coast Fractured and Porous Rock Plan determination: NSD6020/2001 - Bundjalung People of Byron Bay #3 which includes the right to "which includes the right to '5 (c) take and use the water for personal, domestic and communal purposes (including cultural purposes...)' (effective 20 May 2020). Reference: National Native Title Tribunal. National Native Title Register Details. 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](http://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/Pages/NNTR_details.aspx?NNTT_Fileno=NCD2019/001).

basic landholder rights are estimated in the plans, which could be updated if and when a specific water extraction amount is agreed.

- The plans refer to an outdated version of the minimum construction requirements for water bores in Australia (the plans refer to the third edition published in 2012, but there was a fourth edition released in 2020).<sup>140, 141, 142</sup> The plans should reflect the current version or generically to the most up to date version of these guidelines.

The fact that the plans have not been updated for these two amendment examples, is evidence that the process for triggering a plan change as a result of a non-mandatory amendment is not functional. The Commission considers that the lack of implementation of non-mandatory conditions is due to the lack of clear systems, processes and procedures.

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.<sup>143</sup>

## 13.4 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 being recognised in the plans
- potentially poor socio-economic and/or environmental outcomes relating to water supply works being installed to an old standard
- potentially poor socio-economic and or environmental outcomes relating to identified studies that have not been implemented that are critical to implementing plan amendments (for example rules to protect groundwater dependent ecosystem those identified in Clause 58 in the South Coast Plan and Clause 63 in the North Coast Coastal Sands and North Coast Fractured and Porous Rock plans).

---

<sup>140</sup> Clause 64(b) North Coast Coastal Sands Plan, Clause 64(b) North Coast Fractured Porous Rock Plan, Clause 59(b) South Coast Plan provides for amendment of specific clauses in the plans to specify different standards or requirements for decommissioning water supply works or construction requirements for water supply works. The current requirements referred to in these plans are defined in the plans as 'document published by the National Uniform Drillers Licensing Committee entitled Minimum Construction Requirements for Water Bores in Australia, 2012 ISBN 978-0-646-56917-8'.

<sup>141</sup> National Uniform Drillers Licensing Committee 2011 (2012) *Minimum-construction-guidelines-for-water-bores-in-Australia - Third edition*. Available at: [https://www.water.wa.gov.au/\\_\\_data/assets/pdf\\_file/0005/1796/Minimum-construction-guidelines-for-water-bores-in-Australia-V3.pdf](https://www.water.wa.gov.au/__data/assets/pdf_file/0005/1796/Minimum-construction-guidelines-for-water-bores-in-Australia-V3.pdf).

<sup>142</sup> National Uniform Drillers Licensing Committee 2020 (2020) *Minimum construction guidelines for Water bores in Australia - Fourth Edition*. Available at: <https://www.adia.com.au/documents/item/458>.

<sup>143</sup> 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>).