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AUDIT OF IMPLEMENTATION

Unregulated river and alluvial water sharing plan audit report card

Prepared for the period between 1 July 2008 and 30 June 2013

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Contents

Tables	ii
Acronyms and abbreviations	iv
Glossary	iv
Introduction	1
Part 3 – Basis for water sharing	3
Part 4 – Environmental water provisions.....	6
Part 5 – Basic landholder rights	8
Part 8 – Rules for granting access licences	9
Part 9 – Rules for granting and amending water supply works approvals	10
Part 10 – Limits to the availability of water.....	11
Part 11 – Rules for managing access licences	14
Part 12 – Access licence dealing rules	15
Part 13 – Mandatory conditions	17
Part 15 – Plan amendments.....	18

Tables

Table 1: Water sharing plan sections that do not require report cards	1
Table 2: Flow reference points	3
Table 3: Changes to flow reference points	3
Table 4: Very low flow class	4
Table 5: Daily flow sharing	5
Table 6: Changes to flow classes	5
Table 7: Limits to the availability of water	6
Table 8: Very low flow	6
Table 9: Visible flow	7
Table 10: Pumping restrictions	7
Table 11: Domestic and stock rights	8
Table 12: Native title rights	8
Table 13: Harvestable rights	8
Table 14: Licence applications	9
Table 15: Runoff harvesting dams and in-river dams	10
Table 16: Water supply works approvals	10
Table 17: Assessment of current long-term average annual extraction limit	11
Table 18: Variation to plan limit	12
Table 19: Compliance with plan limit	12
Table 20: Available water determinations	13
Table 21: Water allocation account management	14
Table 22: Very low flow access	14
Table 23: Infrastructure failure	14
Table 24: Management of local impacts	14
Table 25: Minister's dealing principles	15
Table 26: Constraints within water source	15
Table 27: Change of water source	15
Table 28: Conversion of access licence category	16
Table 29: Water allocation assignments between water sources	16
Table 30: Mandatory conditions – access licences and water supply works approvals	17
Table 31: Floodplain harvesting	18

Table 32: Coastal Sands Water Source 18

Table 33: Alluvial aquifers downstream of the tidal limit..... 18

Table 34: Stormwater harvesting..... 19

Acronyms and abbreviations

AWD	Available water determinations
BLR	Basic landholder rights
CtP	Cease-to-pump
EMU	Extraction management unit
FRP	Flow reference point
LTAEL	Long-term average annual extraction limit
NSW DPI	NSW Department of Primary Industries
S and D	Stock and domestic
the Minister	NSW Minister for Natural Resources, Land and Water
WM Act	<i>Water Management 2000</i> (NSW)

Glossary

Water sharing plan term review refers to the Minister's decision to extend the existing plan or replace it with a new one at the end of its first 10 year term in line with CI 43A provisions of the *Water Management Act 2000*.

Amend water sharing plan refers to changes made to the plan during its 10 year term. These changes may be provided for in the original plan provisions or made by the Minister under s.45(1)(a) of the WM Act

Introduction

This report card covers the *Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008* that commenced on 1 July 2008. It is one of two report cards (the other covers inland groundwater) prepared by the NSW Office of Water and refined by the Audit Panel appointed by the Minister under section 44 of the *Water Management Act 2000* (WM Act).

The report cards were used by the Audit Panel in its review of whether the water sharing plan provisions of the three plans covered by the 2013 audit are being given effect to. This is the first audit of these plans and covers the five year period from 2008-2009 to 2012-2013.

The report cards form an attachment to the Audit Panel's final report to the Minister. The report includes details on the audit process and Panel membership, together with the findings and additional measures identified by the Audit Panel that are required to give effect to the current plans, and lessons for future water sharing.

Report cards are aligned with the sections in the water sharing plans. There are no report cards for plan sections that provide context or those that contain only enabling provisions linking the plan to the WM Act (see Table 1).

Table 1: Water sharing plan sections that do not require report cards

Plan Section	Title
Part 1	Introduction
Part 2	Vision, objectives, strategies and performance indicators
Part 6	Bulk access regime
Part 7	Requirements for water under access licences
Part 14	Monitoring and reporting

Reflecting the requirements of the WM Act and the Audit Panel's terms of reference, the report cards focus on the implementation of the provisions in the plans. They do not attempt to assess the outcomes or effectiveness of the plan in achieving its objectives.

Assessment of implementation is classified as follows:

- **Always implemented:** Always implemented when required, or not required to be implemented as triggers for action have not been reached, but everything is in place should action be required.
- **Sometimes implemented:** Required to be implemented and sometimes implemented.
- **Not implemented:** Required to be implemented but never implemented.
- **Not required:** Activities not yet scheduled to commence or Minister has not exercised her discretion to act.

The preparation of the report cards has required an examination of each individual clause in each audited plan. Consequently, the level of detail, wording and implementation activities reflects the variations across each plan. Wherever possible, activities that have the same implementation requirements and classification across plans have been grouped together.

The focus on implementation of water sharing plan provisions also means that the report cards do not summarise all of the water management activities that the government is involved in. Activities that complement the implementation of the plans or are undertaken to fulfil NSW requirements under the National Water Initiative, State Plan or other drivers are not reported on.

The considerable NSW Government effort and investment in the establishment, monitoring and review of performance indicators of water source condition changes are also not covered by the report cards. These performance indicators will be used to determine the performance of the plan against its objectives at the end of the 10 year term and so would be classified in the report cards as “Not required” (activities not yet scheduled to commence). Information on ecological and social and economic performance monitoring is available in the progress reports for the relevant water sources and elsewhere on the NSW Office of Water website at www.water.nsw.gov.au.

Part 3 – Basis for water sharing

Table 2: Flow reference points

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Always implemented	Flow reference points (FRP) established for all water sources with flow classes.	<p>The real time hydrometric stations used as FRPs for numerous water sources were operational for all days during the audit period.</p> <p>The FRP for the Never Never Creek Water Source was upgraded to a real time hydrometric station in 2011.</p> <p>Hydes Creek Water Source has been classified as high priority for implementation based upon the Office of Water's macro assessment process comparing ecological risk and community dependence. Its FRP is the staff gauge at Kethels Road Bridge. This is considered an adequate FRP and has not been identified for upgrade to a real time hydrometric station.</p>	

Table 3: Changes to flow reference points

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Not required	Changes to the FRPs have not been required in this plan.	<p>The plan's FRPs were considered suitable during the first five years of its operation.</p> <p>The hydrologic studies and changes to FRPs referred to in this clause have not been required.</p>	Routinely assess the suitability of existing FRPs and the need for hydrologic studies.

Table 4: Very low flow class

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Always implemented	Very low flow classes were implemented.	<p>Interim arrangements for cease-to-pump (CtP) announcements are in place that either rely on water users:</p> <ul style="list-style-type: none"> • checking real time data website for telemetered flow information, or • manually reading water level and using their internal communication strategy to distribute this information to other users. <p>The very low flow class was not triggered in any water source with a telemetered FRP during the first five years of the plan (Bellinger River, Boggy Creek, Coastal Bellinger, Thora-North Arm Bellinger, Rosewood Creek, Never Never Creek).</p> <p>The Office of Water does not record daily water levels for staff gauges in the Bellinger Extraction Management Unit (EMU) and therefore cannot confirm if the very low flow class was triggered in the Coastal Kalang, Hydes Creek and Kalang River water sources.</p> <p>For those water sources/management zones without flow classes, all licence holders must CtP when there is no visible flow immediately upstream of their pump site.</p> <p>NOW is trialling the establishment of a dedicated website with flow information for licence holders applying CtP conditions. The reading taken at 9am would be included on the website and would apply for 24 hours.</p>	Review the outcome of the Office of Water's trial CtP website.

Table 5: Daily flow sharing

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Not implemented	Full daily flow sharing has not been introduced in any water source.	<p>The systems required to implement daily flow sharing above the CtP have not been rolled out as anticipated.</p> <p>Broad scale uptake of metering by users has not been implemented, despite incentives provided under the 2006 IPART Determination to reduce bills through a 2-part tariff for metered water users. Additionally, the compliance resources provided for in the 2006 IPART Determination were insufficient to implement these rules. Increases in water charges recommended in the 2010 IPART Determination were in part aimed to address this issue.</p> <p>It is unlikely that water extraction metering will be introduced in the majority of coastal unregulated catchments in the near future, however a range of monitoring options are to be considered.</p> <p>NOW policy on water extraction monitoring is currently being reviewed as a result of knowledge gained in recent metering projects.</p> <p>Determination of whether NOW or the State Water Corporation will be responsible for water extraction monitoring and accounting in coastal unregulated catchments is still required.</p>	<p>Resolution of water extraction monitoring and water account management responsibilities in coastal unregulated catchments by NOW and State Water Corporation.</p> <p>The responsible organisation to investigate appropriate long-term water measurement options for coastal unregulated catchments following the July 2015 IPART determination.</p>

Table 6: Changes to flow classes

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Not required.	Minister did not exercise discretion.	The various triggers for changes to flow classes were not met during the first five years of the plan. For example, CtP conditions were not experienced in Boggy Creek Water Source due to generally wet conditions. It was therefore not possible to establish if the CtP exceeded visible flow in some areas of the water source.	The Office of Water to consider the appropriateness of field verification of flow levels where it is incomplete and decide if it is necessary to inform the water sharing plan term review.

Part 4 – Environmental water provisions

Table 7: Limits to the availability of water

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not implemented	<p>Planned environmental water provisions are implemented via limits to extraction placed on all licences issued under the WM Act.</p> <p>In the absence of water use information the level of compliance with these licence conditions cannot be established.</p>	See report cards for Part 10 (Limits to the availability of water) for further details.	See comments in Part 10 (Limits to the availability of water).

Table 8: Very low flow

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Sometimes implemented	<p>All licences issued under the WM Act in those water sources with flow classes typically include very low flow conditions on works, however this has not occurred for this plan area.</p> <p>In the absence of WM Act conditions, <i>Water Act 1912</i> conditions still operate within this plan area.</p>	<p>See report card Part 13 (Mandatory conditions) for further details.</p> <p>The very low flow class was not triggered in any water source with a telemetered FRP during the first five years of the plan (Bellinger River, Boggy Creek, Coastal Bellinger, Thora-North Arm Bellinger, Rosewood Creek, Never Never Creek).</p> <p>The Office of Water does not record daily water levels for staff gauges in the Bellinger EMU and therefore cannot confirm if the very low flow class was triggered in the Coastal Kalang, Hydes Creek and Kalang River water sources.</p>	See comments in Part 10 (Limits to the availability of water).

Table 9: Visible flow

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Sometimes implemented	All licences issued under the WM Act typically include a visible flow condition on works, however this has not occurred for this plan area. In the absence of WM Act conditions, <i>Water Act 1912</i> conditions still operate within this plan area.	<i>See report card Part 13 (Mandatory conditions) for further details.</i>	<i>See comments in Part 10 (Limits to the availability of water).</i>

Table 10: Pumping restrictions

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not implemented	All access licences issued under the WM Act that are within the relevant water sources should include pumping restrictions on works. This has not occurred for this plan area.	<i>See report card Part 13 (Mandatory conditions) for further details.</i> All licence holders in the Hydes Creek Water Source (tidal and non-tidal) and Never Never Creek Water source must only pump up to a maximum of 8 hours/day when flow at the relevant FRP is at defined levels.	<i>See comments in Part 10 (Limits to the availability of water).</i>

Part 5 – Basic landholder rights

Table 11: Domestic and stock rights

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Always implemented	Basic landholder rights (BLR) are available in the plan area, subject to water availability.	The Office of Water is developing Reasonable Use Guidelines for the take and use of water for domestic consumption and stock watering. These will set limits on extraction for the reasonable use of water for landholders who take water from a river, lake or aquifer for domestic and stock use. Without the reasonable use guidelines in place, there is no ability to limit the amount of water that can be taken under a domestic and stock right.	When the guidelines are approved by the Government, the Office of Water to ensure that use is limited in line with guidelines for the take and use of water for domestic consumption and stock watering.
	Not required	The Minister has not established the reasonable use guidelines (provision under s.52 of the WMA and provided for in the plans).		

Table 12: Native title rights

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Not required	No native title rights for water have been established in this plan area during the first five years of its operation.		

Table 13: Harvestable rights

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Always implemented	Harvestable rights are available in the plan area.	There were no changes to the harvestable rights order during the first five years of plan operation.	

Note: No report cards have been prepared for Parts 6 or 7 of the plans as they do not contain any provisions requiring action by the government.

Part 8 – Rules for granting access licences

Table 14: Licence applications

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Always implemented	Procedures are in place to grant access licences in accordance with the plan.	No new access licences were received or granted during the first five years of plan operation.	

Part 9 – Rules for granting and amending water supply works approvals

Table 15: Runoff harvesting dams and in-river dams

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Always implemented	Procedures are in place to grant access licences in accordance with the plan.	There were no applications for new or amended runoff harvesting dams and in-river dams during the first five years of the plan.	

Table 16: Water supply works approvals

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Always implemented.	Procedures are in place to grant access licences in accordance with the plan.	There were no applications for new or amended water supply works during the first five years of the plan.	

Part 10 – Limits to the availability of water

Table 17: Assessment of current long-term average annual extraction limit

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not implemented	No assessment of the long-term average extraction has been undertaken as there is no monitoring of extraction.	<p>See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details on water use measurement.</p> <p>In the absence of water use information, it is not possible to confirm the level of compliance with these licence conditions. However, it is unlikely that the limit has been exceeded in the Bellinger EMU since it was set at the sum of entitlements and anecdotal evidence suggests that the wet conditions during the audit period prevented full use of entitlements.</p>	<p>See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details of required actions associated with water use measurement.</p> <p>The Office of Water to assess the long-term average annual extractions in the unregulated water sources against the plan limits annually following establishment of water use measurement.</p> <p>The Office of Water to report the results of assessment and proposed management actions, if required, once adequate water use data is available.</p>

Table 18: Variation to plan limit

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not implemented	The long-term average annual extraction limit (LTAAEL) has not been changed in the plan area to reflect changes in entitlement.	<p>See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details on water use measurement.</p> <p>In the absence of water use information, it is not possible to confirm the level of compliance with these licence conditions.</p>	<p>See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details of required actions associated with water use measurement.</p> <p>The Office of Water to assess the long-term average annual extractions in the unregulated water sources against the plan limit annually following establishment of water use measurement.</p> <p>The Office of Water to report the results of assessment and proposed management actions, if required, once adequate water use data is available.</p>

Table 19: Compliance with plan limit

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not implemented	Compliance with the LTAAEL has not been assessed in the manner prescribed in the plan.	<p>See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details on water use measurement.</p> <p>In the absence of water use information, it is not possible to confirm the level of compliance with these licence conditions.</p>	<p>See Report Cards for Part 3 (Basis for water sharing – daily flow shares) for details of required actions associated with water use measurement.</p> <p>The Office of Water to assess the long-term average annual extractions in the unregulated water sources against the plan limits annually following establishment of water use measurement.</p> <p>The Office of Water to report the results of assessment and proposed management actions, if required, once adequate water use data is available.</p>

Table 20: Available water determinations

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Always implemented	Available Water Determinations (AWD) for each Bellinger water source have been published on the NOW website annually since plan commencement.	<p>Details of AWDs are available on the NSW Office of Water internet site www.water.nsw.gov.au</p> <p>The AWD public register only contains the Bellinger water sources AWDs for the 2011/12 water year. The register is typically updated by State Water, who only update AWDs for those water sources in which it manages water accounts.</p>	Ensure AWDs are published on the Office of Water's public register.

Part 11 – Rules for managing access licences

Table 21: Water allocation account management

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not implemented	None of the account management provisions have been implemented.	<p>See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details on water use measurement.</p> <p>Such provisions rely on water use monitoring, which has not been introduced in any coastal unregulated plan area.</p>	See Report Cards for Part 3 (Basis for water sharing – daily flow shares) for details of required actions for water use measurement.

Table 22: Very low flow access

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not required	There was no change to licences accessing very low flow (Schedule 3) during the first five years of the plan.		

Table 23: Infrastructure failure

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not required	There were no instances of infrastructure failure during the first five years of the plan.		

Table 24: Management of local impacts

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not required	The Minister has not declared any local impact areas.		

Part 12 – Access licence dealing rules

Table 25: Minister's dealing principles

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Sometimes implemented	In the absence of water use monitoring, only dealings involving permanent transfer of licences has been permitted in this plan area.	If a water user has installed a metering device, individual temporary trading can occur.	See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details of required actions for water use measurement.

Table 26: Constraints within water source

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Sometimes implemented	There have been no trades within the plan area during the first five years of the plan, however systems are in place should applications be received for permanent trades.	In the absence of water use monitoring, temporary trades are not possible at a broad scale, however if a water user has installed a metering device, individual temporary trading can occur.	See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details of required actions for water use measurement.

Table 27: Change of water source

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Sometimes implemented	In the absence of water use monitoring, there have been no dealings involving a change of water source.	In the absence of water use monitoring, temporary trades are not possible at a broad scale, however if a water user has installed a metering device, individual temporary trading can occur.	See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details of required actions for water use measurement.

Table 28: Conversion of access licence category

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Sometimes implemented	In the absence of water use monitoring, there have been no dealings involving conversion of a licence category.		

Table 29: Water allocation assignments between water sources

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not implemented	The plan allows for water allocation assignments between water sources within the Bellinger EMU. In the absence of water use monitoring, there have been no dealings of this type.	There was no demand for this type of trade during the first five years of the plan.	<i>See Report Cards for Part 3 (Basis for water sharing – daily flow sharing) for details of required actions for water use measurement.</i>

Part 13 – Mandatory conditions

Table 30: Mandatory conditions – access licences and water supply works approvals

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
All years	Not implemented	<p>Conditions have not been placed on any access licence or works approval within the plan area.</p> <p>Significant operational difficulties for licence and approval holders, together with compliance and operational problems for NOW, were identified during drafting of mandatory conditions. For example, imposing cease-to-pump conditions on water access licences would have created barriers to water trading.</p>	<p>The plan was amended in 2013 so that its water access rules could be specified as a condition on the water supply work approval and not the water access licence, which is the current approach for all water sharing plans. Some access rules have also been re-written to ensure that the intent is clear so that licence holders can comply with the plan.</p> <p>Access licence and water supply works approval conditions were issued in May 2014 following completion of the Office of Water's licence condition review.</p>	The issuing of access licence and water supply works approval conditions in May 2014 has addressed this matter.

Note: A report card has not been prepared for Part 14 (Monitoring and reporting) of the plan, as it does not contain any rules that must be implemented. Details of monitoring activities can be found on the NSW Office of Water internet site www.water.nsw.gov.au.

Part 15 – Plan amendments

Table 31: Floodplain harvesting

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Not required	Minister did not exercise discretion.	There were no changes to the plan or its relevant provisions to account for floodplain harvesting for the first five years of the plan as the NSW Floodplain Harvesting Policy only commenced in May 2013.	The Office of Water to incorporate floodplain harvesting provisions into the plan as required.

Table 32: Coastal Sands Water Source

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Not required	Minister did not exercise discretion.	Coastal sands within the plan area will be picked up in a separate water sharing plan for the North Coast Coastal Sands (currently under development).	

Table 33: Alluvial aquifers downstream of the tidal limit

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Not required	Minister did not exercise discretion.	Inclusion of alluvial aquifers downstream of the tidal limit will be undertaken at the plan term review in line with NOW policy as specified in Macro water sharing plans – the approach for groundwater. A report to assist community.	

Table 34: Stormwater harvesting

Subject of assessment	Assessment	Explanation of assessment	Comment	Required action
<i>All years</i>	Not required	Minister did not exercise discretion.	Provision not implemented to date. The Office of Water is formulating an urban stormwater harvesting policy to outline the regulatory framework and likely changes to the plan.	