Minister’s Foreword

As a state, NSW recognises the importance of its role in managing the water resources in the Murray-Darling Basin. It has been a leader in water reform for the past 30 years, leading the way with environmental works and measures and water recovery, occurring before the establishment of the Commonwealth Water Act 2007 and the Basin Plan 2012.

NSW is committed to managing its water resources in the Murray-Darling Basin sustainably by balancing the requirements of industry, communities and the environment to achieve economic, social and environmental outcomes. NSW acknowledges that this is a key objective of the Basin Plan. However, a key pillar of the success of NSW environmental and water reforms, has been the strong focus for a triple bottom line consideration that takes into account the impacts on our communities.

Future implementation programs and approaches for the Basin Plan need to ensure that this remains the focus.

NSW will continue to advocate to ensure that the impact on NSW communities is reduced by having a more sensible and practical approach to achieving environmental outcomes, which highlights the importance a range of measures beyond a simple focus on system flow, to include complementary and other natural resource management initiatives and measures.

Importantly, this means working with communities to deliver outcomes for our regions. NSW is committed to working with our communities to make environment gains through projects that reduce the socio-economic impact of the Basin Plan on regional communities and reduce risk of third party impacts to water users and landholders.

The NSW welcomes the Murray Darling Basin Authority findings, which deliver an opportunity to improve the adaptive management ability of Basin Plan implementation, and more importantly provides an opportunity for our communities to deliver local solutions to the environment’s needs. Importantly, this is centred around a reduction in amount of water recovered from communities and delivers on the promise to incorporate triple bottom line considerations in decision making.

NSW welcomes the opportunity to comment on these amendments which reflect the NSW Government’s commitment to ensuring our communities and industries can prosper through this important reform process.

NIALL BLAIR
Minister for Regional Water
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minister’s Foreword</td>
<td>2</td>
</tr>
<tr>
<td>Contents</td>
<td>3</td>
</tr>
<tr>
<td><strong>Executive Summary</strong></td>
<td>4</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>NSW recommendations - Northern Basin</td>
<td>4</td>
</tr>
<tr>
<td>NSW recommendations - Groundwater and other amendments</td>
<td>4</td>
</tr>
<tr>
<td>Attachments</td>
<td>4</td>
</tr>
<tr>
<td><strong>Attachment A - Northern Basin</strong></td>
<td>5</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Key Findings of the NBR</td>
<td>5</td>
</tr>
<tr>
<td>General limitations of the NBR and the Basin Plan</td>
<td>6</td>
</tr>
<tr>
<td>The proposed amendments and what they mean for NSW</td>
<td>8</td>
</tr>
<tr>
<td>Toolkit measures</td>
<td>9</td>
</tr>
<tr>
<td>NSW position on proposed amendments</td>
<td>10</td>
</tr>
<tr>
<td><strong>Attachment B - Groundwater</strong></td>
<td>11</td>
</tr>
<tr>
<td>About the Groundwater amendments and key findings</td>
<td>11</td>
</tr>
<tr>
<td>Groundwater unit descriptions</td>
<td>11</td>
</tr>
<tr>
<td>Groundwater SDL compliance methodology and reasonable excuse rules</td>
<td>11</td>
</tr>
<tr>
<td>Water Quality Management Plans for groundwater</td>
<td>11</td>
</tr>
<tr>
<td><strong>Attachment C - Other Amendments</strong></td>
<td>13</td>
</tr>
<tr>
<td>Water Resource Plan boundary changes</td>
<td>13</td>
</tr>
<tr>
<td>SDL resource unit shared reduced amount</td>
<td>13</td>
</tr>
<tr>
<td>Surface water SDL compliance methodology and reasonable excuse rules</td>
<td>13</td>
</tr>
<tr>
<td>Trade Limits</td>
<td>14</td>
</tr>
</tbody>
</table>
Executive Summary

Introduction

This NSW submission provides comment on the Basin Plan amendments proposed by the Murray-Darling Basin Authority (the Authority) which were placed on exhibition in November 2016. The preparation of this submission has been led by the Department of Primary Industries Water, with contributions from the Office of Environment and Heritage, Department of Primary Industries Fisheries, Department of Primary Industries Agriculture and WaterNSW.

The proposed amendments cover three key areas with a section of this submission being dedicated to each. They are:

- Outcomes of the Northern Basin Review (NBR),
- Groundwater amendments, and
- Other amendments, including reasonable excuse provisions and allocation of downstream contributions.

The proposed amendments are the result of ongoing engagement between NSW and the Authority, including the comprehensive Northern Basin Review process. As a result, NSW is largely supportive of the package of amendments as they are the culmination of extensive negotiations. However, NSW has identified a number of areas where unfavourable outcomes would result should the amendments be passed in their current form. This submission provides a description of those concerns.

NSW recommendations - Northern Basin

- NSW supports the reduced recovery volume from 390 GL to 320 GL in the Northern Basin.
- NSW recognises the importance of, and intent to balance the triple bottom line, i.e. environmental, social and economic outcomes.
- NSW has already recovered more water across the Northern Basin NSW zone than what is required under the proposed changes to the Basin Plan.
- Recovery to date has caused socio-economic impact to NSW communities.
- NSW requires flexibility to enable water recovery targets to potentially be met from existing recovery already undertaken in NSW.
- NSW supports the intent of ‘toolkit’ measures.
- Implementation of complementary measures is supported but must avoid unacceptable third party impacts, and should be fully funded by the Commonwealth Government.

NSW recommendations - Groundwater and other amendments

- NSW is generally supportive of the groundwater and other amendments targeted at improved implementation.
- NSW seeks corrections to some groundwater source descriptions and boundaries to ensure consistency with existing NSW planning boundaries.
- NSW seeks changes to clauses that will compromise the state’s ability to comply with requirements due to the restrictive drafting around circumstances that may arise during implementation, such as reasonable excuse provisions.

Attachments

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Northern Basin amendments commentary</td>
</tr>
<tr>
<td>B</td>
<td>Groundwater amendments commentary</td>
</tr>
<tr>
<td>C</td>
<td>Other amendments commentary</td>
</tr>
</tbody>
</table>
Attachment A - Northern Basin

Introduction

The Northern Basin Review (NBR) was commissioned to address key knowledge gaps around environmental watering requirements, the social and economic impacts of water recovery, and the importance of water to the Aboriginal nations of the Northern Basin.

The Authority’s NBR focussed on the key themes of environmental science, hydrologic modelling, and socio-economic analysis. Environmental science work concentrated on the Condamine-Balonne and the Barwon-Darling River systems. As a result of this work, the Condamine-Balonne and Barwon-Darling environmental water requirements were reassessed and altered. Socio-economic analysis was undertaken in 21 communities across six valleys of the Northern Basin. Socio-cultural research was completed in Brewarrina, St George and Dirranbandi.

Key Findings of the NBR

A key finding of the NBR was that almost any practical recovery volume will not return the Northern Basin to full environmental health. The Authority’s modelling of their flow indicators showed that overall, the level of improvement in environmental outcomes reaches a point of diminishing return as water recovery increases above 320 GL, while social and economic impacts in some valleys continue to increase.

The NBR also indicated that environmental outcomes may be improved using approaches that do not rely on water recovery alone; the implementation of ‘toolkit’ measures has the potential to improve environmental outcomes without causing further socio-economic impacts to communities.

Environmental outcomes

The NBR modelled a range of water recovery volumes from 278 GL (i.e. the current recovery volume) up to 415 GL. None of the modelled scenarios met all 43 of the flow indicator targets for the Northern Basin, indicating that a level of ecological risk remains across the Northern Basin.

The modelling indicated that:

- 16 out of 43 flow indicators met with the existing water recovery levels (278 GL),
- 22 out of 43 flow indicators met with the proposed recovery target (320 GL),
- 21 out of 43 flow indicators met under the current Basin Plan settings (390 GL), and
- 24 out of 43 flow indicators met under the maximum recovery scenario modelled (415 GL).

This modelling by the MDBA indicates that, for recovery levels up to the current Basin Plan settings of 390 GL, a level of water recovery beyond 320 GL will not significantly improve environmental outcomes.

The NBR modelling has indicated that similar environmental outcomes to the original Basin Plan are achieved with the proposed recovery volume. While NBR modelling indicates that 22 flow indicators can be achieved with 320 GL of water recovery, it is generally acknowledged that a reduced water recovery target may potentially compromise the ability to meet Basin Plan ecological outcomes.

Hydrological modelling

Hydrological modelling was used to assess potential outcomes from various water recovery volumes in each of the Northern Basin valleys. A number of water recovery scenarios were modelled, from 278 GL (i.e. the current recovery volume) up to 415 GL. Different assumptions were also modelled, including how and where water is to be recovered.
The modelling indicated that both the pattern of recovered water and the strategy underlying the use of environmental water are important factors in flow outcomes. While the efficient use of environmental water for whole-of-system outcomes is an overarching principle of the Basin Plan, in the Northern Basin it represents a change to existing operational capacity. A coordinated release strategy and a catchment scale strategy were both modelled; the latter represents a management strategy more aligned to current operating practices in the Barwon-Darling.

**Social and economic outcomes**

The socio-economic analysis completed as part of the NBR examined the effect of reduced water availability on the area of irrigation and, consequently, employment at the community level in 21 communities. Other drivers of change in communities were also recognised, including climate, technological advances in the farming sector, growth in the mining sector, demographic shifts and general economic conditions.

The impact of water recovery undertaken to date has been felt by a number of NSW communities across the Northern Basin. The NBR analysis indicated that the effect of water recovery is increasingly evident as the area of irrigation declines by more than 15%. Under current water recovery, the communities most impacted are Bourke, Collarenebri, Dirranbandi, Narromine, Trangie, Warren, St George, Moree and Wee Waa, with Collarenebri and Warren seeing the greatest decrease in the maximum area of irrigation. In these two areas alone it is estimated that as much as 24,000 ha has been removed from the maximum area available for irrigated production. Bourke, St. George (Queensland), Moree and Trangie have all experienced similar declines in irrigated areas, upwards of around 10%.

The reduction in irrigated hectares due to water recovery has a subsequent effect on employment, the magnitude being dependent on the diversity of each community’s agriculture sector and the relative importance of irrigated agriculture. Collarenebri and Warren have experienced the biggest decrease (proportionally) in farm and farm-related sector employment.

**General limitations of the NBR and the Basin Plan**

NSW remains concerned by a number of the modelling assumptions and approaches used to underpin the expected environmental outcomes of the Basin Plan; these specific concerns have previously been raised with the MDBA. While committed to meeting Basin Plan commitments, NSW believes that SDLs for the Northern Basin must be based on best available science and fit-for-purpose modelling that provides achievable outcomes. NSW accepts that all models inherently have assumptions and uncertainties; however, NSW does not support the Authority’s broader decision making processes which have prescribed particular levels of water recovery for specific catchments.

Significantly, decisions made in regards to the NBR water recovery need to be robust and defensible. Outcomes must not be overly prescriptive given the uncertainty inherent in the emerging understanding of environmental watering requirements and the need to balance triple-bottom line outcomes.

**Recognition of cumulative socio-economic impacts**

Many communities in the Basin face challenging social and economic conditions. Consideration of the cumulative impact on these communities of the Basin Plan and prior state water reforms is vital to appreciate the magnitude of the challenges these communities face. Support for communities impacted by water recovery should remain as a major priority.

For example, in the Namoi, the Achieving Sustainable Groundwater Entitlements Program resulted in an overall reduction of approximately 56% of groundwater entitlement. Under the proposed 320 GL recovery target, a further 38 jobs are expected to be lost in addition to job losses already experienced from Basin Plan recovery undertaken to date.
Of particular concern in the Barwon-Darling is the Authority’s proposal for a more than five-fold increase to the recovery required locally. This proposed increase from 6 GL to 32 GL matches existing levels of recovery in the Barwon-Darling which has resulted in approximately 30 job losses in Bourke. These socio-economic impacts imposed by the Basin Plan are in addition to previous water reforms which resulted in a reduction in the water entitlements by approximately two-thirds. The MDBA’s decision to amend the recovery volume for the Barwon-Darling is lacking in detailed explanation when alternative modelled volumes demonstrate similar environmental outcomes (i.e. the same number of flow indicators achieved with a smaller recovery volume).

**Operational realities - flow coordination**

With the exception of one scenario, all modelling undertaken as part of the NBR assumed a coordinated watering approach. Both the Authority and NSW agree that this type of water delivery is not currently possible given existing operational and system constraints. However, the Authority has chosen to adopt an approach that ‘represents a future in which environmental water holders are able to efficiently coordinate their water to achieve desired flows through the Barwon-Darling’. Such a ‘future’ is a long way from operational reality. Significant changes to existing operational capacity and forecasting ability would be required to be able to manage flows through multiple catchments and would involve substantial investment in water management improvements. A particular concern with this modelling assumption is that, as the models use fixed travel times and fixed assumptions about river losses in highly variable systems, the environmental outcomes that can be achieved are significantly overstated, raising concerns regarding the targeted environmental outcomes identified by the MDBA.

As acknowledged by the Authority, current river management practices are not as effective at achieving flow indicators as the modelled coordinated delivery approach, which goes beyond current river management capability, especially regarding in-stream flow indicators in the Barwon-Darling. NSW understands that the assumed flow coordination could provide substantial environmental benefits; however, the investment to implement such a regime has not yet been identified, nor has the risk of not achieving the ecological outcomes, anticipated by using a modelling approach that assumes flow coordination, been identified. This is why NSW is supportive of toolkit or complementary measures, as they offer the potential to achieve outcomes beyond a flow orientated focus.

The NSW Government notes that due to modelling uncertainties, modelling may potentially underestimate the volumes required to achieve environmental outcomes (that is, the flow indicators specified).

The Authority’s modelling assumes the ability to release regulated flows on top of unregulated river flows in regulated river systems to achieve specified flows within those systems and in the downstream Barwon-Darling. The implementation of Prerequisite Policy Measures (PPMs) is only required in areas that have Sustainable Diversion Limit Adjustment Mechanism projects, as such the (draft) NSW Policy Pre-requisite Measures Implementation Plan (PPMIP) does not include this type of flow arrangement in any of the northern Basin valleys.

**The use of flow indicators**

The concept of flow indicators and their use in the overall approach adopted in Basin Plan modelling is based on a heavily regulated system. While these systems exist in the Northern Basin, the approach does not align with some of the more variable unregulated systems of the Northern Basin, such as the Barwon-Darling. NSW has continued to highlight the importance of a fit-for-purpose approach to Basin Plan objectives which properly accounts for the highly variable nature of some northern systems.

Flow indicators prescribe very specific delivery targets in terms of volume, timing and duration; this approach cannot be practically achieved in some river systems in the Northern Basin. Furthermore, the majority of flow indicators are not representative of valley-specific environmental watering
conditions and provide a poor predictor of likely ecological outcomes as they have not been updated with the latest science. While this issue has previously been raised by NSW, it has remained unresolved throughout the Northern Basin.

Also raised previously is that many flow targets are outside of a manageable range of flow, and would require substantially larger holdings of environmental water. For example, a flow indicator in the Namoi of 4000 ML/day for 45 days (with a minimum duration of 7 days) would require approximately half the volume of Lake Keepit. Similarly, another baseflow requirement would need almost twice the volume of water recovery planned for this system under the current Basin Plan.

The Authority has acknowledged that some indicators are outside the range of influence and stated that they are not attempting to actively deliver these types of flows. Regardless, these same indicators are included in the assessment of water recovery scenarios, irrespective of whether or not they can be achieved. A more pragmatic approach would instead work towards targets that are both within management scope while also producing an environmental benefit. State jurisdictions requested that the Authority concentrate on flow indicators that are within a manageable zone, whereby proposed recovery volumes could be considered alongside modelling analysis; however, this request was not adopted.

While flow indicators provide a useful flow-to-ecology translation function for both regulated and unregulated river systems, it must be acknowledged that the active delivery of flow indicator events is possible only in regulated systems. The variable unregulated systems in the Northern Basin, together with the relatively small storage sizes of contributing catchments, means that the operators’ ability to manipulate flows to meet specific flow targets throughout the system is significantly limited. NSW acknowledges that a range of evidence from multiple sources were used to infer (new) eco-hydrologic relationships; however, their application in unregulated systems is questionable where the ability to control flows routinely is limited.

A limited modelling approach to recovery volumes was undertaken. Rather than adopting a systematic approach of modelling incremental recovery volumes to identify tipping points or thresholds in the recovery volumes and environmental outcomes, either at a valley-scale or whole-of-north, a somewhat arbitrary selection of recovery scenarios was modelled. A systematic or stepped approach to the analysis would allow for a more complete understanding of the trade-offs being made as part of the triple bottom line analysis.

For example, in the Namoi catchment, hydrological modelling has indicated that current recovery has already resulted in major improvements for river channel connectivity indicators. However, no incremental increase in recovery volumes was modelled to determine a recovery level at which floodplain/wetland indicators show a marked improvement, undermining the triple-bottom line outcome for the catchment.

NSW has continually advocated for a fit-for-purpose approach to Basin Plan flow objectives which properly account for the operational capacity and limitations of the Northern Basin. NSW retains concerns about approaches used to determine environmental outcomes in the Northern Basin.

The proposed amendments and what they mean for NSW

The Authority is recommending that the Northern Basin water recovery target be reduced from 390 GL a year to 320 GL, based on consideration of triple bottom line outcomes.

While the proposed global recovery volume of 320 GL is likely to result in an overall reduction of social and economic impacts from the original Basin Plan, the proposed amendments to the SDLs in some NSW catchments will continue to impact significantly on some communities. NSW is particularly concerned with the proposed changes, which require increased in-valley recovery figures, particularly in the Namoi and the Barwon-Darling. Not only do these proposed changes increase the impacts in these catchments, they also reduce the flexibility for NSW to meet the
water recovery targets from the existing recovery, by reducing the number of catchments that can contribute the shared reduction requirements from six to two catchments.

Importantly, the socio-economic analysis highlighted how the effects of water recovery can be influenced by changes in the volume, location or type of entitlements recovered, and whether the recovery occurs through infrastructure investment or purchase. The timing and the pace of water recovery also influence socio-economic effects on communities. These factors must be considered by the Authority in setting water recovery targets, and the Commonwealth when undertaking any further required water recovery.

The socio-cultural research completed as part of the NBR was undertaken to find out about the importance of environmental water to Aboriginal Nations in the Northern Basin. The research focussed on the communities of Brewarrina, St George and Dirranbandi and showed a direct relationship between environmental watering and improved Aboriginal well-being. The research was reflective of cultural valuing of water in relationship to local socio-cultural conditions.

NSW is subject to obligations under the Ramsar Convention - an international treaty for the conservation and sustainable use of wetlands. NSW has Ramsar listed sites in the Macquarie and Gwydir catchments and intends to ensure their ongoing management and preservation, which under the proposed changes to the Basin Plan may come at a cost to other environmental values.

NSW recognises that ecological values in the Northern Basin face challenging environmental conditions. Long-term monitoring of important ecological values such as native fish shows poor fish community conditions in most valleys due to a range of impacts. The cumulative impact of these threats is important in understanding the challenges to ecological values in the Northern Basin. NSW acknowledges that there are environmental trade-offs as a result of the proposed amended recovery volume, with less water being available to help meet ecological outcomes. It is possible that Basin Plan environmental watering strategies may need to be revised and focussed towards the maintenance of ecosystem health.

NSW anticipates that the Basin-wide Environmental Watering Strategy would need to be amended to reflect the reduced water recovery volume in the Northern Basin, which impacts on the ability to meet improvements in some of the environmental outcomes. It is necessary for the Commonwealth Government to develop a robust monitoring and evaluation framework that assesses environmental outcomes resulting from Basin Plan implementation.

**Toolkit measures**

An important recommendation of the NBR was that environmental outcomes may be improved using approaches that do not rely on water recovery alone; the implementation of ‘toolkit’ (or complementary) measures can potentially meet, or improve, environmental outcomes, without causing further socio-economic impacts to communities across the Northern Basin.

Toolkit proposals include:

- Works to promote native fish health including fishway construction and the control of cold water pollution;
- Improved protection of environmental flows;
- Targeted water recovery;
- Works to address the active management of environmental flows; and
- Addressing Gwydir constraints.

NSW has previously provided in-principle support to the intent of the Authority’s toolkit measures, to assist in the delivery of environmental outcomes across the Northern Basin. NSW maintains this position, provided that appropriate funding is made available and there are no negative third party impacts.
The development and implementation of toolkit measures will be supported by NSW only where there are no third party impacts and where there is a clear commitment from the Commonwealth Government to fund toolkit measures. NSW acknowledges the proposed note in s.6.04(3) which refers to the Authority’s recommendation to change the recovery volume provided there is a commitment from governments to implement toolkit measures, but recognise that a formal agreement is required before they can be implemented.

NSW looks forward to collaborating with the Commonwealth and Queensland governments in understanding the range and potential of toolkit measures for the Northern Basin. NSW also recognises the value in having a method to properly assess the likely social and ecological benefits of potential toolkit measures.

**NSW position on proposed amendments**

The NSW Government supports the Authority’s recommendation that the Northern Basin water recovery target be amended to 320 GL based on the triple bottom line outcomes of the NBR.

NSW has already recovered more water in total for the Northern Basin NSW zone than the 180 GL of water required under the proposed changes to Basin Plan recovery targets. NSW does not support any increases to in-valley targets. NSW requires flexibility to enable water recovery to potentially be met from existing recovery volumes within the zone.

The NSW-proposed solution is to increase the shared reduction volume nominated for the Northern Basin NSW zone, without altering the proposed total recovery volume of 320 GL.

While NSW has some concerns about the potential for third party impacts and the funding of toolkit projects, toolkit measures are generally supported to improve environmental outcomes without causing further socio-economic impacts to communities across the Northern Basin.

As much as possible, water recovery should be based on infrastructure and complementary solutions rather than through direct water entitlement purchasing. Investing in infrastructure achieves environmental benefits as well as flow-on economic community benefits. NSW recommends that the MDBA prioritise monitoring of environmental outcomes to inform adaptive management, rather than recovering more water.

NSW is supportive of efforts to improve access to waterways for Aboriginal people and improve engagement in water planning and management.

NSW also supports the proposal to divide the Northern Basin zone into two zones, being the Northern Basin Queensland and Northern Basin NSW zones. This amendment will allow each state to administer the allocation of the shared reduction in each resource unit within its zone.
Attachment B - Groundwater

About the Groundwater amendments and key findings

NSW is generally supportive of the proposed amendments relating to groundwater. Much of what is captured in the proposed amendments are the result of iterative consultation between NSW and the Authority. There are a selection of concerns that NSW still holds in relation to groundwater source unit descriptions and boundaries, groundwater SDL compliance methodology and reasonable excuse rules, and the need to develop Water Quality Management Plans for groundwater water resource plans. NSW has raised these issues with the Authority during previous engagements, both formally and informally. NSW is taking the opportunity to again reiterate these concerns through this formal submission.

Groundwater unit descriptions

NSW suggests some edits to a number of the Authority’s proposed groundwater SDL resource unit descriptions. These suggested changes are made assuming the horizontal and vertical boundaries of the SDL units will be changed to match the NSW groundwater source boundaries, as has been agreed to through previous negotiations. That is, they will include the buried portions of the NSW groundwater sources and not limited to the outcropped areas as currently illustrated in Basin Plan material. NSW has identified errors relating to the Darling Alluvium boundary and Gunnedah-Oxley Basin MDB. NSW has provided detailed suggested edits to the Authority.

With regard to the revised Schedule 4, NSW has previously written to the Authority seeking the exclusion of the Sydney Basin MDB groundwater SDL resource unit from the Basin Plan. The regional groundwater flow systems within the Sydney Basin are influenced by geology rather than the overlying surface water catchment topography. Only the western margin of the Sydney Basin is within the Murray-Darling Basin and the regional groundwater flow is eastward out of the Basin. Hydrogeologically, the management of groundwater in this area is therefore more aligned to the management of coastal groundwater areas than other groundwater areas in the Murray-Darling Basin.

Groundwater SDL compliance methodology and reasonable excuse rules

With regard to the proposed method for determining compliance with groundwater SDLs, NSW does not support 6.12C(2)(a) which only allows adjustment of actual take in the circumstances mentioned in the example in 6.12C(4)(b), that is if the Commonwealth has not achieved the recovery target. This means that any other accepted reasonable excuse will not result in the excess take above the SDL being excused. NSW is of the view that a negative adjustment to the amount of actual take or a positive adjustment to the amount of permitted take should be allowed for any acceptable reasonable excuse.

Additionally, NSW does not support the proposed section 6.12C(3)(b), as this clause prevents a Basin State from claiming a reasonable excuse for SDL non-compliance unless the Basin State sets out the steps it will take to make good any excess take (i.e. payback to the environment an amount of water equivalent to the excess).

This effectively means there is no difference between SDL non-compliance action with or without a reasonable excuse, except where the reasonable excuse is the Commonwealth not achieving the recovery target. NSW is of the view that there may be circumstances where excess take should not have to be paid back, in the event that there is a reasonable excuse.

Water Quality Management Plans for groundwater

NSW believes the Basin Plan requirements relating to Water Quality Management Plans (WQMPs) are drafted in a surface water context that does not directly translate to groundwater quality issues
and management options. While the relevant clauses do not form part of the proposed amendments, NSW views the timing of this amendment package as an opportunity to suggest changes to drafting.

The Authority’s recently issued position statement (7A, “Requirements for water quality management plans in groundwater WRPs”,) confirms that WQMPs are required for groundwater WRPs, however not all WQMP requirements may apply. Specifically, unless there is “significant hydrological connection to surface water”, water quality objectives for raw water and irrigation would not apply, nor would the objectives and targets for recreational purposes. The irrigation salinity targets identified under the Basin Plan (9.17) also would not apply in NSW due to an absence of groundwater irrigation infrastructure operators.

The requirement of a WQMP for each groundwater WRP appears to be a redundant administrative task for the jurisdictions given that groundwater quality issues will be addressed with appropriate rules as already required under the following Basin Plan clauses:

- 10.18 Priority environmental assets dependent on groundwater
- 10.19 Groundwater and surface water connections
- 10.20 Productive base of groundwater, and
- 10.21 Environmental outcomes relating to groundwater

Further, the NSW WRP risk assessment process will identify any risk to groundwater quality degradation and it will be addressed by appropriate mitigation measures as required.

Therefore, NSW suggests that Chapter 10 Part 7 be amended so WQMPs are only required to be developed for surface water WRPs on the justification and accompanying commitment that the relevant groundwater quality issues are already required to be managed due to the presence of clauses 10.18 to 10.21.
Attachment C - Other Amendments

Water Resource Plan boundary changes

NSW supports the proposed amendments relating to splitting the current northern basin zone which spans Queensland and northern NSW resource units, into separate Queensland and northern NSW zones.

SDL resource unit shared reduced amount

NSW does not support the proposed shared reduction target of 24 GL for the Northern Basin NSW zone (6.05(2)(a)). NSW is supportive of increasing the proposed shared reduction target for the zone providing that the proposed total recovery amount for the zone (180 GL) does not change. This flexibility could mean that NSW water recovery commitments could potentially be achieved without undertaking additional water.

NSW does not support the proposed 30 June 2017 notification date (s7.23) for requesting an adjustment relating to shared reduction amounts to a SDL resource unit as this would not align with outcomes of the SDL Adjustment Mechanism process which is in train.

Surface water SDL compliance methodology and reasonable excuse rules

With regard to the amendment to insert a new section after 6.11(4), the proposed drafting of the new 6.11(5) would only allow adjustment to the cumulative balance if the reasonable excuse was as referred to in the example specified in 6.12(4)(b). That is, where the Commonwealth has not achieved its recovery target. This means that any other accepted reasonable excuse will not result in the excess take above the SDL being excused as any other reasonable excuse would not result in an adjustment to the cumulative balance. This would be at odds with the intent of section 6.12(4)(b) which clearly allows for reasonable excuses in addition to the example provided.

NSW is therefore of the view that the proposed section 6.11(5) should be redrafted so that it does not specifically refer to the example reasonable excuse specified in 6.12(4)(b) but rather any reasonable excuse permitted under section 6.12(4).

Further, NSW has significant concerns with section 6.12(3)(b) which prevents a Basin State from claiming a reasonable excuse for SDL non-compliance unless the Basin State sets out the steps it will take to reduce the cumulative balance to zero, and with the new note that is proposed to be inserted after this section. Section 6.12(3)(b) provides that, given the proposed drafting of the new section 6.11(5), any reasonable excuse for SDL non-compliance put forward by a Basin State other than where the Commonwealth has not achieved the water recovery target, will not be accepted unless the Basin State is prepared to make good the excess take (i.e. payback to the environment an amount of water equivalent to the excess).

This effectively means there is no difference between SDL non-compliance action with or without a reasonable excuse for SDL non-compliance, except where the reasonable excuse is the Commonwealth not achieving the recovery target. NSW is of the view that there may be circumstances where excess take should not have to be paid back, that is, where there is a reasonable excuse. NSW is of the view that a negative adjustment to the amount of actual take or a positive adjustment to the amount of permitted take should be allowed for any acceptable reasonable excuse.

For example, in regulated river systems, underuse of water allocated to the environment may be re-socialised through normal water allocation processes to all licence holders which may in turn lead to a breach of the SDL. This breach will have occurred even though there has been no change in irrigator behaviour. It will have occurred due to a change in the behaviour of the environmental water licence holder. In this situation, the amount of underuse by the environment...
should be either added to the permitted use for consumptive users or deleted from their actual take.

NSW is therefore of the view that section 6.12(3)(b) should be deleted which would in turn mean that the proposed note would not be required.

**Trade Limits**

NSW supports the proposed amendments relating to preventing the application of volumetric limits on trade in unregulated rivers except for physical or environmental reasons.