



Australian Government



Assessment of reasonable excuse claim for compliance with sustainable diversion limit (SDL)

Barwon–Darling Watercourse 2019–20

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GPO Box 1801, Canberra ACT 2601
engagement@mdba.gov.au



1800 230 067
mdba.gov.au

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The guidance and support received from the Murray Lower Darling Rivers Indigenous Nations, the Northern Basin Aboriginal Nations and our many Traditional Owner friends and colleagues is very much valued and appreciated.

Aboriginal people should be aware that this publication may contain images, names or quotations of deceased persons.

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Summary

Compliance with the sustainable diversion limit (SDL) in the Barwon–Darling Watercourse SDL resource unit is being assessed for the 2019–20 year under the bilateral agreement between NSW and the MDBA¹. Compliance was assessed under the bilateral agreement because a water resource plan (WRP) for the area had not been accredited prior to 1 July 2019.

The bilateral agreement reflects a commitment to the provision of information and reporting which parallels the requirements of s 71 of the *Water Act 2007* (Cth) and an assessment of compliance with the SDL in accordance with the methods in Part 4 of Chapter 6 of the *Basin Plan 2012* (Cth) (the Basin Plan) and consistent with the [SDL Reporting and Compliance Framework \(2018\)](#) (the Framework).

The Authority's role is to assess that material consistent with Part 4 of Chapter 6 of the Basin Plan and the Framework. This report sets out the assessment and compliance findings of the Authority on that basis.

The Authority notes that upon accreditation of the NSW water resource plans the Register of Take will formally commence and, pursuant to s 6.08 of the Basin Plan, on its commencement must record a cumulative balance of zero.

The Basin Plan describes the circumstances in which Basin states may claim a reasonable excuse and these also apply under the bilateral agreement. For the 2019–20 water year, NSW has reported an apparent exceedance of the SDL compliance trigger in the Barwon–Darling Watercourse surface water SDL resource unit. The annual permitted take in the resource unit was 203 GL and the reported annual actual take was 260 GL, resulting in a difference of 57 GL. This is equivalent to a cumulative balance between permitted and actual take of -32% of the SDL, a debit which exceeds the -20% SDL compliance trigger.

NSW undertook a self-assessment of compliance identifying the exceedance and submitted a report to the MDBA in March 2021, updated in June 2021, claiming reasonable excuses due to:

- the operation of the (proposed) WRP for the SDL resource unit, and
- for circumstances beyond the state's control (incomplete water recovery)

as per s.6.12(4)(a) and (b) of the Basin Plan.

The reasons set out for most of the excess relate to limitations of the model used to determine the permitted take.

The Authority has assessed these claims of reasonable excuse and determines that the Barwon–Darling Watercourse SDL resource unit was non-compliant in the 2019–20 water year.

The rationale for this finding follows.

Reasonable Excuse claim – operation of the WRP

With respect to NSW' claim of reasonable excuse due to the operation of the proposed WRP, the Authority found that NSW did not operate in a manner fully consistent with the proposed water

¹ Murray–Darling Basin Authority. (2020) Interagency agreement MDBA and NSW, retrieved from [Bilateral agreements with Basin state and territory governments | Murray–Darling Basin Authority \(mdba.gov.au\)](#)

resource plan in the 2019–20 water year. As such, the Authority determines this claim for reasonable excuse (made for most of the SDL exceedance volume) is not valid under the Basin Plan and is therefore not accepted.

In particular, NSW did not deliver on one of the mechanisms it has committed to in the bilateral agreement to ensure that take will remain within the SDL (i.e. in relation to s 10.11 of the Basin Plan). This is the commitment in the NSW *Water Sharing Plan for the Barwon–Darling Unregulated River Water Source 2012* to assess and report on compliance with its own state limit (the long-term average annual extraction limit – or LTAAEL). The Authority understands that NSW has not enforced compliance with the LTAAEL in the Barwon–Darling since the commencement of the WSP in 2012. The view of the Authority is that these compliance checks are an important part of the suite of rules included in the proposed WRP under s 10.11, which together ensure that actual take does not exceed the permitted take.

Reasonable Excuse claim – beyond the state’s control:

With respect to the NSW claim owing to circumstances beyond the state’s control, due to incomplete water recovery at 1 July 2019, the Authority determines this claim for reasonable excuse is valid under the Basin Plan and is accepted.

This applies only to the portion of the excess that is attributable to the incomplete water recovery. The incomplete water recovery is only a small fraction (approximately 2 GL or 4%) of the total SDL debit and is insufficient to change the overall finding for the SDL resource unit.

As set out in the Basin Plan, this allows for an adjustment to the register of take in the 2020–21 water year.

Summary of make good actions

The report submitted by NSW set out its understanding of the reasons for the excess and steps to bring the cumulative balance back to compliance – known as make good actions.

NSW’s proposed make good actions relate directly to improving the permitted take method and include:

- Updating the Barwon–Darling Watercourse annual permitted take model to better reflect current water management practices in relation to application of restrictions. NSW has proposed that the updated model be provided to MDBA in advance of reporting for 2020/21 water year.
- Recalibrating the Barwon–Darling Watercourse models to reflect data from updated flow meters that record different diversions than previous meters over equivalent pumping events. This is to correct inconsistencies between the current recorded actual take volumes and those which were originally used to calibrate the model. A series of actions are proposed by NSW in relation to this matter. As a first step, as part of reporting for the 2020/21 water year, NSW will provide a report describing the difference in metering outcomes resulting from the recalibration program. By October 2022 updated versions of the Cap, BDL and APT models will be submitted to MDBA. Importantly, later updates will address further recalibration based on data from meters that comply with Australian Standard AS4747,

which are being rolled out in the Barwon–Darling in accordance with the *NSW Non-Urban Water Metering Policy*².

These actions will update the models to reflect the best available information.

The data provided for the 2019–20 water year is the first formal SDL compliance data available, however the Authority has also reviewed reporting against the ‘Cap on Diversions’ and during the SDL transition period, and notes that reported use has remained within the formal and trial limits. Importantly, this data also shows the significant swings in apparent compliance outcomes that can occur from one year to the next, given the variation in water availability and the level of accuracy of the permitted take model. It illustrates the importance of taking adequate time to properly understand usage trends in the system.

The view of the Authority is that there are several actions in relation to the measurement, management and regulation of water resources in the SDL resource unit that the NSW government has committed to for an extended period of time, but not yet fully implemented. Had these measures been implemented it would have improved the management and regulation of water resources in the Barwon–Darling Watercourse SDL resource unit.

The Authority recommends that, in addition, to the “make good” actions brought forward by NSW, NSW should accelerate the implementation of Basin Plan compliance reporting in the Barwon–Darling by delivering on its previous commitments. This includes implementing a published work plan which prioritises the timely completion of the following activities in the Barwon–Darling Watercourse SDL resource unit:

- Implement systems that enable reporting of s. 71 SDL compliance data for the end of each water year by the end of October, commencing in 2020–21
- assessing and reporting compliance with the NSW take limit (the long term average annual extraction limit – the LTAAEL), commencing with the 2020–21 water year
- accreditation and implementation of the Barwon Darling Watercourse water resource plan in the 2021–22 water year
- regulation of floodplain harvesting in the 2021–22 water year, including measurement of floodplain harvesting take from 1 July 2021
- monitor compliance by individual entitlement holders and mandate and enforce the take up of meters that meet Australian Standards (AS4747) and the NSW non-urban water metering framework
- complete the upgrade of the Barwon–Darling Watercourse model to the Source platform in a manner that ensures best practice and transparency, and harmonisation of the model with upstream tributaries by the end of 2023.

As all of the make good actions, both brought forward by NSW and recommended by the Authority, relate to improving the tools used to assess SDL compliance, they should be implemented regardless of future SDL compliance outcomes (i.e. regardless of whether the cumulative balance returns to zero).

²NSW Department of Planning, Industry and Environment (2020) *NSW Non-Urban Water Metering Policy* (publication no: PUB20/447) retrieved from [NSW Non-Urban Water Metering Policy](#)

Further SDL compliance data is required before a judgement can be made as to whether actual growth in use is occurring in excess of the SDL in the Barwon–Darling. The data for the 2020–21 year will be key to determining if and when a growth in use response is required to be implemented.

1 Overview of NSW's reasonable excuse claim

The *Water Act 2007* (Cth) (the Water Act) and the *Basin Plan 2012* (Cth) (the Basin Plan), provide the basis for annual SDL reporting and compliance of water resources in the Murray–Darling Basin. The MDBA's *Sustainable Diversion Limit Reporting and Compliance Framework* (2018)³ provides further details of the roles and responsibilities, calculations of the compliance cumulative balance and reasonable excuse process in the case of an exceedance.

The Authority is using the report provided by NSW under the bilateral agreement as an equivalent to the report required under s71 (g) and (h) of the *Water Act 2007* (Cth) to track NSW performance in meeting Basin Plan requirements in relation to SDL compliance⁴. This report is the Authority's assessment of NSW's claim for reasonable excuse for exceedance of the sustainable diversion limit (SDL) compliance trigger for the Barwon–Darling Watercourse resource unit.

1.1 Reasonable excuse claim identification

Table 1. Specifications of the reasonable excuse claim being assessed.

Details of compliance assessment	
State	NSW
SDL Resource Unit	Barwon–Darling Watercourse (SS19)
Water resource plan area	Barwon–Darling Watercourse
Date of final submission to MDBA	2021
Reasonable Excuse report file name	Reasonable excuse report for Barwon–Darling SDL compliance 2019 20
RE class ³ (RE1.1, RE1.2, RE1.3, RE2, RE3, RE4, RE5)	RE1.1 (Operation of the WRP – Discover) and RE4 (Beyond a state's control)
Reporting Water Year	2019–20
Is this the first year that this reasonable excuse has been claimed in this SDL resource unit?	Yes
Relevant SDL compliance assessment report	MDBA SDL compliance report 2019–20 (2021)

³ Murray Darling Basin Authority. (2018) *Sustainable diversion limit reporting and compliance framework* (publication no: 37/18) [Sustainable Diversion Limit Reporting and Compliance Framework \(mdba.gov.au\)](https://www.mdba.gov.au/publications/sustainable-diversion-limit-reporting-and-compliance-framework)

⁴ As per schedule 2, action 1 of the bilateral agreement MDBA and NSW. Murray–Darling Basin Authority (2020) [Bilateral agreements with Basin state and territory governments | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/bilateral-agreements-with-basin-state-and-territory-governments)

For the location of Barwon–Darling Watercourse SDL resource unit refer to map provided in Appendix A. Note the Barwon–Darling SDL resource unit does not include Menindee Lakes.

1.2 Methods used in 2019–20 Barwon–Darling Watercourse SDL compliance assessment

The Barwon–Darling Watercourse water resource plan (WRP), and its associated documents, was prepared by NSW and submitted to MDBA for assessment on 30 June 2020. NSW has since withdrawn this WRP prior to resubmission. The MDBA is working with NSW to provide a WRP consistent with the requirements of the Basin Plan. Once agreed it can be recommended for accreditation by the Commonwealth Minister responsible for water.

For the determination of 2019–20 SDL compliance, in accordance with the bilateral agreement the proposed permitted take and actual take methods, which form part of the proposed WRP, have been used in this assessment.

On the basis of the as-yet-incomplete assessment of the proposed WRP, NSW has been provided with preliminary, without-prejudice advice that there appear to be some ambiguities in the methods presented within the proposed WRP. Consequently, NSW and MDBA agreed to an interim solution to support the compliance assessment for the 2019–20 water year.

The interim approach was agreed on the basis that if, on completion of the assessment of the proposed WRP, the Authority determines that the proposed WRP is inconsistent with the Basin Plan, there will be an opportunity for NSW to correct the methods as part of a re-submission of the water resource plan. Agreement to this interim approach does not imply that the Authority would recommend that the Minister accredit a water resource plan that includes these methods.

A summary of agreed methods relevant to the Barwon–Darling Watercourse SDL compliance assessment is provided in Table 2.

It should be noted that once a WRP is submitted for assessment and subsequently accredited, the Register of Take will formally commence from the first full water year the WRP is in place. This means, once this occurs that the cumulative balance as determined under this assessment will re-set to zero.

Table 2. Methods agreed by MDBA and NSW for Barwon–Darling SDL compliance assessment in 2019–20.

Issue	Agreed method for 2019–20 SDL compliance assessment
Inconsistencies within the WRP itself, the baseline diversion limit (BDL) report and the annual permitted take (APT) report for floodplain harvesting volumes and methods	<p>Agreed that:</p> <ol style="list-style-type: none"> 1. For 2019–20 water year, use APT methods set out in the APT Scenario Report⁵ of the WRP package submitted by end June 2020 2. Annual actual take (AAT) = 22.2 GL/y long term average volume from APT model as per the WRP⁶, Table F-1, Schedule F 3. BDL = 14.3 GL/y revised estimate consisted with APT model scenario report
Accounting for basic rights diversions	Consistent with the submitted APT report, the long-term average estimate of take by basic rights (0.826 GL) is included in the actual take volumes and not within the APT.

⁵ NSW Department of Planning, Industry and Environment. (2019) *Barwon–Darling Watercourse WRP – Modelling – Annual Permitted Take Scenario Report (update)* retrieved from [Barwon–Darling Watercourse Water Resource Plan – Annual Permitted Take Scenario Model \(mdba.gov.au\)](http://mdba.gov.au)

⁶ NSW Department of Planning, Industry and Environment. (2019) *Barwon–Darling Watercourse Water Resource Plan – Barwon–Darling Watercourse Water Resource Plan (mdba.gov.au)*

2 Details of NSW’s reasonable excuse claim

2.1 Reasonable excuse claim and state submission

An updated NSW *Reasonable Excuse Report – Barwon–Darling 2019/20 Sustainable Diversion Limit Compliance* report⁷ was submitted to the MDBA on 18 May 2021. The report sets out the key SDL compliance data included in Table 3.

Table 3. Key SDL compliance data for the Barwon–Darling in 2019/20

Parameter	Result
SDL (long-term average, 1895 to 2009)	176.228 GL
20% SDL compliance trigger (debit amount)	-35.246 GL
Annual Permitted take for 2019–20*	203.065 GL
Annual Actual take for 2019–20	259.909 GL
Cumulative balance for year 1 (the difference between permitted and actual take)*	-56.844 GL Or -32% of the SDL

* The annual permitted take (and as a result, the cumulative balance) has been updated in the Register of Take further to discussion with NSW, after the reasonable excuse submission and this assessment. The subsequent update does not change the compliance assessment.

NSW provided its self-assessment of compliance identifying the exceedance along with a statement of compliance (Appendix B). Under the bilateral agreement and consistent with Basin Plan⁸, NSW submitted a claim for reasonable excuse (RE) and set out its understanding of the reasons for the excess and the steps it will take to reduce the cumulative balance of the register to zero or less (or ‘make good’ actions).

NSW submitted claims for a reasonable excuse that the excess take was a result of:

- primarily, the operation of the proposed water resource plan (reasonable excuse classification RE1.1, as per the MDBA’s *SDL reporting and compliance framework*, section 5.4) and
- circumstances beyond the State’s control i.e. incomplete water recovery by the Commonwealth (reasonable excuse classification RE4, as per the MDBA’s *SDL reporting and compliance framework*, section 5.4).

For RE1.1, a statement of assurance has been received from NSW within its reasonable excuse claim indicating that water management in the Barwon–Darling Watercourse was consistent with the bilateral agreement during the 2019–20 year.

⁷ NSW Department of Planning, Industry and Environment. (2021) *Reasonable Excuse Report – Barwon–Darling 2019/20 Sustainable Diversion Limit Compliance*

⁸ Basin Plan (2012) s6.12(1), (3) and (5)

2.2 Reasons for the excess

For context, the following sections provide the Authority's summary of the NSW claims and reasons contributing to the SDL compliance exceedance in 2019–20. The NSW *Reasonable Excuse Report – Barwon–Darling 2019/20 Sustainable Diversion Limit Compliance* report should be read in conjunction with this report.

2.2.1 Modelling of restrictions (RE1.1)

Prior to the start of the 2019–20 water year, the Barwon–Darling Watercourse had experienced several years of dry conditions and in June 2019 a cease-to-flow condition had been established. The dry conditions persisted until late January 2020 and from February to April 2020 widespread rain occurred in the upper catchments of the Barwon–Darling basin. A high flow event in the Barwon–Darling occurred in February and March 2020 as a result of this rain.

During the start of the event a temporary water restriction order issued under section 324 of the NSW *Water Management Act 2000*⁹ suspended access to flows in the Barwon–Darling until NSW was satisfied sufficient water would reach Menindee Lakes to provide for critical needs.

NSW states that temporary water restriction orders are represented in the permitted take model of the Barwon–Darling Watercourse submitted to MDBA but are based on historical practices and need to be updated.

The annual permitted take model of the Barwon–Darling Watercourse includes a representation of past practices that placed an embargo on diversions. Under certain circumstances and Ministerial direction, historical embargos were imposed on diversions in the Barwon–Darling and upstream tributaries to suspend access to entitlements to secure water through to the Menindee Lakes for Broken Hill. In February 2019 a pipeline from the Murray River to Broken Hill was completed to improve the reliability of the Broken Hill water supply. Updated rules developed in the water sharing plan and water resource plan, along with the use of temporary water restriction orders under section 324 of the *Water Management Act 2000* are now used to protect river connectivity, town water, cultural, social and environmental outcomes, along with water volumes in the Menindee Lakes. The updated water sharing plan rules are included in the permitted take model, however the current approaches to using temporary restrictions under section 324 has changed since the model was finalised and these should be updated in the APT model.

The restrictions applied in the permitted take model were in place for a longer period of time compared to what occurred in reality in the 2019–20 water year, materially lowering the permitted take.

2.2.2 Meter data used to calibrate model (RE1.1)

Along the Barwon–Darling Watercourse the water flow meters that are used to record the volume of irrigator diversions were progressively updated from Time and Event meters to MACE meters over the period from 1999 to about 2018. In December 2017, in response to the Matthews report, the

⁹ *Water Management Act 2000* (NSW) s. 324 [Water Management Act 2000 No 92 - NSW Legislation](#)

NSW government introduced a new metering framework for the valley, including targets to move to meters that meet Australian Standards.

A comparison of daily pumping records between the time and event meters to mostly MACE meters (also some AS4747-compliant meters) on the same installed pumping equipment (the NSW Metering Recalibration Program) is expected to improve the understanding of diversions that have occurred historically. This may potentially lead to model improvements that could ultimately result in better estimates of the Cap on Diversions (the Cap), Baseline Diversion Limits (BDL), and, therefore, the SDL.

While NSW does not have advance estimates of the effects of metering accuracy upgrades, it cites anecdotal reports from individuals suggesting that there is a discrepancy of up to 10% between the older agreed rates and the newer meters. If so, this means the effects of this metering recalibration project are likely to have some impact on resolving the issue.

2.2.3 Incomplete recovery of water for the environment (RE4)

The Basin Plan sets a recovery target of 32 GL/y of water for the environment from the Barwon–Darling watercourse. On 1 July 2019, this recovery was incomplete, with a long-term volume of 1.6 GL/y remaining to be recovered.

NSW claims 2 GL (its calculation of the annualised expression of incomplete recovery) owing to a reasonable excuse RE4 on the basis that Commonwealth led water recovery was incomplete during the 2019–20 water year, for reasons beyond the state’s control.

2.3 Steps to make good

The NSW *Reasonable Excuse Report – Barwon–Darling 2019/20 Sustainable Diversion Limit Compliance* report sets out its proposed make good actions to return the Barwon–Darling Watercourse to SDL compliance, including timeframes for implementation.

NSW indicates that the apparent excess can largely be rectified by making improvements to the annual permitted take model. This includes better accounting for current practices, and recalibrating the models using updated metering data.

In relation to the incomplete water recovery, NSW states it continues to support Commonwealth water recovery in the Barwon–Darling Watercourse and has processed all relevant trade applications.

NSW indicates that the reasonable excuse claim report uses the best-available information for all forms of take. In addition, the NSW Healthy Floodplains Program is underway to improve estimates of take by floodplain harvesting (both actual and permitted), and upgrades to the estimates for local water utilities and domestic and stock usage are expected to be delivered through a Barwon–Darling Watercourse source model build.

3 Authority’s assessment of claim

3.1 Authority’s evaluation of NSW reasonable excuse claims

The Authority has assessed the reasonable excuse claim provided by NSW for the Barwon–Darling Watercourse SDL resource unit in 2019–20. This assessment was undertaken consistent with relevant provisions of the bilateral agreement between NSW and MDBA, requirements set out in the Water Act (s71), the Basin Plan (Chapter 6 Part 4) and the MDBA’s *SDL reporting and compliance framework*. The following sections provide details of how the Authority undertook the assessment.

The Basin Plan requires that a Basin state must submit the following to make a claim for a reasonable excuse:

- a report to the Authority setting out the reasons for the excess¹⁰ and,
- (for surface water) provide the Authority, in writing, with the steps the State will take to reduce the cumulative balance of the register to zero or less¹¹ (a credit).

Any claim for reasonable excuse and the accompanying report is required to be submitted as part of the Basin state reporting obligations under the Water Act s. 71(1) by the end of October each year¹².

The relevant SDL compliance data and reasonable excuse claim was submitted by NSW to the MDBA to address the above requirements, as set out in Table 4, albeit late.

Table 4: NSW submissions of SDL compliance data and reasonable excuse claim (consistent with SDL reporting and compliance framework s.5.2).

Item	Required	Date provided	Details	Document/s
First submission of s. 71 (water take) data	s. 71 of the Water Act	15 December 2020	Required by 31 October of the following water year. An extension was provided to NSW by the MDBA to this date (under s.71(2) of the Water Act).	Data spreadsheets – contains NSW self assessment of compliance
Reasonable excuse claim	s. 6.12 Basin Plan	29 March 2021	Report including supporting documentation to substantiate the claim: - the reasonable excuse classifications NSW consider apply to the exceedance (section 5.3 of the framework) - Updated self-assessment data sheet	Report and attachments

¹⁰ Basin Plan s6.12(3)

¹¹ Basin Plan s6.12(5)

¹² MDBA’s SDL reporting and compliance framework, 2018, section 5.2

Item	Required	Date provided	Details	Document/s
			- Statement of compliance signed by the DPIE Water, Chief Operating Officer	
Final submission of s. 71 (water take) data	s. 71 of the Water Act	15 April 2021	Updated after MDBA/NSW QA process	Updated data spreadsheets – contains NSW self assessment of compliance
Final submission of reasonable excuse claim	s. 6.12 Basin Plan	18 May 2021	Updated following MDBA's request for specific actions and timelines to deliver on make-good steps	Updated reasonable excuse report

3.1.1 Review of data submitted

With regard to the data submitted, the Authority has undertaken some quality assurance of the data submitted by NSW under s 71 of the Water Act for the purposes of the SDL compliance assessment. This included checks, for example, that all required data was reported, that a reasonable excuse had been claimed where an exceedance was identified, that methods used were consistent with the proposed WRP, logical checks of data with the state narrative, climate conditions and Cap data, and that trade across the Basin balanced. On this basis (and noting the context regarding the methods provided earlier in this report – refer section 1.2), the Authority agrees that NSW has endeavored to apply the relevant methods and provide the best available data for SDL compliance purposes. The final data is published in the *2019–20 SDL compliance report*, in the surface water register of take.

3.1.2 Review of evidence and justification for RE claim 1.1

The MDBA's *SDL reporting and compliance framework* (section 5.2) states if claiming a reasonable excuse under the operation of the WRP for the SDL resource unit, the state's report should also include:

- any reports the Basin state has prepared in relation to compliance with accredited WRPs, in response to Basin Plan Schedule 12 Matter 19, or
- alternatively, the Authority would consider a statement in the Basin state's statement of assurance that the rules in the WRP have been complied with.

The NSW report states that:

“the Barwon–Darling was managed for the entire 2019/20 water year in accordance with the Bi-lateral Agreement between NSW and the MDBA and the proposed Water Resource Plan (WRP) submitted to MDBA for accreditation and published at:

<https://www.mdba.gov.au/publications/mdba-reports/barwon-darling-watercourse-water-resource-plan>.

For a reasonable excuse claim arising as a result of ‘the operation of the WRP’, the application of the methods for determining permitted and actual take and the rules set out in the proposed WRP in

relation to s 10.11 of the Basin Plan are relevant¹³. In the proposed Barwon–Darling Watercourse WRP, s 10.11 refers to the rules set out in specific sections of the NSW *Water Sharing Plan for the Barwon–Darling Unregulated River Water Source 2012*. For take from a watercourse, this includes Part 5 Division 3 (access licences), Part 6 Division 1A and 1B (limits to the availability of water), Part 8 (rules for managing access licences) and Part 11 (mandatory conditions).

Part 6 Division 1A¹⁴ of the water sharing plan refers to calculation and assessment of compliance with NSW long term average annual extraction limit (or LTAAEL). Part 6 Division 1B refers to calculation and assessment of compliance with the long-term average SDL. NSW has provided the material for its assessment of compliance with the SDL. In a follow-up query, NSW indicated to the MDBA (15 April 2021) that it did not calculate or assess compliance with the state limit (the LTAAEL) in the 2019–20 water year, as required in its water sharing plan.

The Authority also notes the conclusions of Alluvium’s October 2019 published report *Audit of the Water Sharing Plan for the Barwon–Darling Unregulated and alluvial water sources 2012*¹⁵ that found that NSW had not enforced compliance with its LTAAEL over the audit period from the commencement of the WSP in 2012 to 31 December 2018. The report states that, in the opinion of the audit team, if these clauses are not being given effect to, the likelihood of not meeting the intended objectives of the water sharing plan is very high.

While there is no evidence to suggest that the remaining rules to share water amongst the river access shares were not followed, the view of the Authority is that these compliance checks are an important part of the suite of rules included in the proposed WRP under s 10.11, which together ensure that actual take does not exceed the permitted take.

On this basis, the conclusion of the Authority is that NSW had not operated in a manner fully consistent with the proposed water resource plan in the 2019–20 water year. As such, the Authority determines that this claim for reasonable excuse is not valid under the Basin Plan and is therefore not accepted.

3.1.3 Review of evidence and justification for RE claim 4

The process for assessing a claim of RE4 is set out in s 4.6 of the *SDL reporting and compliance framework*. There are two components of the Authority’s assessment. These are:

- determining the status of water recovery for each SDL resource unit
- assessment of whether the water recovery was partially or wholly incomplete for reasons beyond a Basin state’s control.

In August 2020, based on the advice from the Department of Agriculture, Water and the Environment¹⁶, the Authority agreed that in relation to the 2019–20 water year, in all cases where

¹³ Intergovernmental agreement Schedule 2, NSW action 1.3.3

¹⁴ *Water Sharing Plan for the Barwon–Darling Unregulated River Water Source 2012* (NSW) version 1 July 2020, retrieved from [Water Sharing Plan for the Barwon–Darling Unregulated River Water Source 2012 - NSW Legislation](#)

¹⁵ Alluvium. (2019) *Audit of the Water Sharing Plan for the Barwon–Darling Unregulated and Alluvial Water Sources 2012* [Barwon–Darling Unregulated and Alluvial Water Sources 2012 \(nsw.gov.au\)](#)

¹⁶ Letter of advice, Department of Agriculture, Water and the Environment to MDBA, received 27 July 2020

there was incomplete recovery at 1 July 2019, the Commonwealth had not achieved the water recovery target it had set for itself for reasons 'beyond a Basin state's control'. Each state was advised of the outcome by letter in early October 2020, to inform their reporting under s.71 of the Water Act for the 2019–20 water year and claims for reasonable excuse (if required).

The Basin Plan sets a recovery target of 32 GL/y of environmental water from the Barwon–Darling Watercourse. On 1 July 2019 this recovery was incomplete with a long-term average volume of 1.6 GL/y remaining to be recovered.

The long-term average volume of incomplete recovery of 1.6 GL/y needs to be adjusted to reflect an annualised volume for the water conditions of the 2019–20 year.

In accordance with Basin Plan s. 6.12(5), the annual amount (2 GL) can be credited to the cumulative balance in the register of take for the Barwon–Darling Watercourse in the 2020–21 water year (also see *SDL reporting and compliance framework* sections 4.6 and 3.2.3).

The Authority accepts NSW's claim for a reasonable excuse as valid under Basin Plan s 6.12(4)(b), owing to circumstances beyond the state's control. This applies only to the portion of the excess (2 GL) that is attributable to incomplete water recovery.

It is noted that the incomplete water recovery is approximately 4% of the total SDL debit.

3.2 Analysis of steps to make good

The following sections provide details of the Authority's assessment of NSW proposed make good actions to return the Barwon–Darling Watercourse SDL resource unit to compliance.

NSW's proposed make good actions largely relate to reasonable excuse claim RE1.1. As the reasonable excuse RE1.1 is not accepted, the Authority has assessed the make good actions provided as per s71(h) of the Water Act – that is, the equivalent actions when there is non-compliance with the SDL.

3.2.1 Analysis of make good actions – non-compliance

The MDBA *SDL reporting and compliance framework* sets out the Authority's expectations in relation to the Basin Plan requirement to 'make good' for non-compliance in s. 4.3.3 *compliance actions*. The following sections provide details of the Authority's assessment of the excess and make good actions.

3.2.1.1 Updating the annual permitted take method

The the SDL exceedance in the Barwon–Darling Watercourse was investigated by NSW and the annual permitted take method found to require improvement. The make good actions are summarized in section 2.3. The make good actions describe how the calculations of permitted take (and hence SDL compliance) could be improved.

A change in water management is not proposed but the make good steps indicate an improved representation of current water management in the permitted take model. Two major adjustments to the permitted take model are identified as:

- updating the model to reflect current management practices for temporary water restrictions and

- recalibrating the Barwon–Darling Watercourse models using updated data sets for water diversion recorded by the newer meters.

The Authority is supportive of an interim approach to update the annual permitted take model that best represents water management practices in the Barwon–Darling Watercourse, subject to the revised model meeting the requirements of the Basin Plan¹⁷.

NSW acknowledges a larger work program improving the flow meters used to measure the water volumes diverted by irrigators. The first stage – working out the recalibration amounts based on the best available meters (largely MACE meters) – is expected to be completed by June 2021. NSW has provided information setting out options and associated timeframes to complete a recalibration of the models with the first full re-calibration to be completed by October 2022.

The Authority supports NSW expediting the rollout and full implementation of meters compliant with AS4747 and the subsequent recalibration of models with the best available data. The Authority notes the current ongoing use of MACE meters which are not compliant with Australian Standards AS4747. While MACE meters may be an improvement on the older ‘time and event’ meters, the Authority has concerns that these do not meet current standards.

The Authority acknowledges that the installation and calibration of AS4747 compliant meters will take several years, and therefore supports the proposed approach of first improving the estimation of diverted water volumes using the newer MACE meters and recalibrating the models, and then repeating the process when a significant proportion of AS4747 compliant meters are in place and have been tested and again recalibrating the models.

NSW also referred to an update of the Barwon–Darling Watercourse model moving from IQQM to the Source platform. A model upgrade may improve the accuracy of the permitted take modelling; NSW does not give any specific commitments in relation to the completion of this work.

The Authority agrees in principle with the steps identified by NSW but holds concerns regarding the practicalities and timeframes for undertaking this work. The Authority notes that there are a number of actions in relation to the measurement, management and regulation of water resources in the SDL resource unit that NSW has committed to for an extended period of time, but not yet fully implemented, that would have improved the management and regulation of water resources in the SDL resource unit.

3.2.1.2 Other forms of take

NSW has undertaken a review of other forms of take as part of its reasonable excuse claim. NSW states that floodplain harvesting estimates will be updated through the Healthy Floodplains Program. While NSW is making good progress in this regard, the Authority notes that information specific to the Barwon–Darling Watercourse SDL resource unit has not yet been publicly released.

Until that work is complete and measurements are available, interim methods are being used for floodplain harvesting. The actual take method included in the proposed WRP for floodplain harvesting uses a value of zero if there is no event, or a modelled long-term average¹⁸ if an event

¹⁷ Basin Plan (2012) s 10.10 & s 10:12

¹⁸ Note this volume represents an average across the years in which floodplain harvesting occurs.

occurs. This is compared to an annual value from the model for permitted take. This was proposed in the WRP as an interim approach. As a floodplain harvesting event occurred in the 2019–20 water year, the long-term average was used¹⁹, this may be an under-estimate of the diversions in that particular year.

The Authority considers there is a high risk of growth in floodplain harvesting until the licensing process is completed and use can be measured and compliance assessed. Risks for take from floodplain harvesting increasing are discussed in the proposed WRP. NSW has developed a monitoring and auditing strategy for floodplain harvesting as referenced in the WRP.

Implementation of the NSW Healthy Floodplains program is essential to regulation of this form of take. The Authority keenly anticipates the completion and implementation of this NSW program.

The Authority agrees that NSW' assumptions need to be made for use under basic rights given the limited information currently available, however, notes that the risk assessment submitted as part of the proposed Barwon–Darling Watercourse WRP has identified a medium risk of growth in take under Basic Rights impacting on water available for the environment. As such, the Basin Plan WRP requirements set out that the management of any potential growth in take under basic rights should be a consideration in future water management arrangements.

3.2.2 Authority recommendations for further make good actions

The Authority agrees that the reasons for the excess set out by NSW, which primarily relate to the permitted take method, could materially impact on the permitted take and the actual take and whether or not an exceedance of the SDL compliance trigger occurs.

It will be necessary to update the permitted take results for 2019–20 once an improved method is available, to understand the difference that an improved method would make to the SDL compliance outcomes.

The Authority also strongly encourages NSW to implement all of its proposed WRP components relevant to SDL compliance and to assess compliance with the LTAAEL.

While not specifically set out as a requirement in the *SDL reporting and compliance framework*, additional data that would help to provide further insights regarding the trends in use in the system could include running of the annual permitted take model (once updated) over the transition period from 2012 to 2019 to provide further data points to analyse trends in water use and determine if there is growth relative to the SDL.

As the make good actions relate to the improving the tools used to assess compliance, the actions should be implemented regardless of future SDL compliance outcomes (i.e. implemented even if the balance is corrected in future water years).

The Authority has identified a range of other issues about the permitted take methods set out in the proposed WRP as part of its as-yet-incomplete WRP assessment, and will seek further improvements

¹⁹ Agreement to this interim approach for the 2019–20 water year under the bilateral agreement does not imply that the MDBA would recommend that the Minister accredit a water resource plan that includes this method.

to the methods to ensure that Basin Plan requirements are met as part of the WRP assessment process.

3.2.3 Analysis of make good actions – RE 4.

The Authority supports the NSW decisions to continue supporting efforts to resolve incomplete water recovery.

3.3 Supplementary evidence reviewed by the Authority

3.3.1 Accuracy of permitted take models

The *SDL reporting and compliance framework* describes the challenges associated with using models to determine permitted take for surface water (refer framework s. 2.1.4). These models are designed for assessing compliance over long-term scenarios, rather than to assess compliance on an annual basis.

Models similar to the annual permitted take models have been used to assess Cap compliance for the past 23 years. By taking into account weather related variability, the models enable trends to be detected earlier and with greater confidence than would otherwise be the case. It is however important that the model limitations are considered when assessing SDL compliance.

The permitted take model used by NSW, in accordance with the proposed WRP, is an updated version of the model used to support compliance with the Cap on Diversions under Schedule E of the Murray–Darling Basin Agreement (i.e. it is understood that the permitted take model has not been recalibrated since Cap, and in that regard is largely the same as the Cap model). With this understanding, further context to this claim can be drawn from Appendix F of the MDBA’s *SDL reporting and compliance framework*. Appendix F indicates that the standard error of modelled diversions in the Cap model of Barwon–Darling is 23%, which is greater than the SDL compliance trigger value of 20% of the SDL. This large standard error is not unexpected because the Barwon–Darling is a long, unregulated river system, with significant flow variability and predicting irrigator behaviour in this environment is difficult.

The level of accuracy of the permitted take model’s representation of diversions and the behaviour of irrigators, could be contributing to the exceedance of the SDL compliance trigger. As 2019–20 is the first year of assessment of SDL compliance, there is only one year of data to review. A running comparison of permitted and actual take over time is needed to build information about trends.

The make good actions proposed by NSW are expected to go some way to improving the estimates of modelled diversions.

3.3.2 Analysis of previous trends in water take under Cap on diversions and SDL transition period

As part of this assessment the Authority has reviewed historical data from the Cap and SDL transition period. Analysis of these data sets is provided below.

3.3.2.1 Cap on diversions analysis

Under compliance arrangements for the Cap on diversions there is a requirement that Basin states report data to the Authority about how much water was actually taken each year compared to the annual Cap targets. Prior to 2019–20 water year, Cap compliance under Schedule E of the MDB agreement was the only enforceable Basin-wide use compliance regime.

It is noted there are key differences between the Cap and the SDL models and methods, such as differences in approaches for adjusting the annual targets (for environmental water) under Cap; and the treatment of the Barwon–Darling and Lower Darling valleys as a combined valley for the assessment of Cap compliance²⁰ whilst under the SDL they are accounted for separately. Notably, while floodplain harvesting was always intended to be included in the Cap, NSW has not reported diversions from floodplain harvesting under the Cap due to low confidence in the available data.

Table 5 shows reported Cap water volumes for the ‘Upper Darling valley’ only (i.e. not combined with the Lower Darling); this river reach is effectively the same as the Barwon–Darling watercourse SDL resource area. A reasonably steady increase in cumulative Cap credits over a seven-year transition period is observed in this data set up to the 2019–20 year.

²⁰ For the first two years of Cap operation, the Barwon–Darling and Lower Darling Cap Valleys were assessed separately for compliance. Following Ministerial Council meeting 29, the valleys were combined for compliance assessments. See *Review of Cap Implementation 1999-00* pp. 22

Table 5. Barwon–Darling Watercourse: analysis of cumulative water take and compliance with the Cap on diversions between 2012 and 2020, all numbers in GL.

	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19	2019–20
Cap Targets (GL)	200.1	101.6	22.6	147.2	292.3	66.7	5.3	169.7
Diversions (GL)	189.3	78.4	31.7	75.7	298.9	19.3	2.4	236.9
Annual Cap Credits (GL/year)	10.8	23.2	-9.1	71.5	-6.6	47.4	2.9	-67.2
Cumulative Cap credits (GL/year)	33.6	56.8	47.7	119.2	112.7	160.1	163.0	95.8
Compliant (189 GL long-term Cap)	Yes							

The average actual annual take over the eight years shown is 117 GL. This is less than the long-term Cap limit of 189 GL/y.

Since Cap compliance started from 1997–98, the Authority notes the Barwon–Darling and Lower Darling combined Cap valleys have recorded eight instances of non-compliance, however NSW has implemented a number of actions in response and a cumulative credit of 680 GL for the combined Cap valley was recorded at the end of the 2018–19 water year.

3.3.2.2 Transition period analysis

The SDL ‘transition period’ reporting represents the period from 2012–13 to 2018–19 which was used to trial the SDL accounting framework and transitioning from Cap reporting to SDL reporting²¹; further information is provided in the MDBA’s transition period water take reports²².

For the Barwon–Darling Watercourse the actual take data methods used in the transition period are comparable to actual take reported in 2019–20, however the trial permitted take volumes are not strictly comparable, as they were derived from the Cap model and not from the annual permitted take model submitted by NSW as part of the WRP package.

²¹ SDL Compliance assessments were not enforceable prior to 2019

²² MDBA. *Transitional SDL water take reports* retrieved from [Transitional SDL water take reports | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/transitional-sdl-water-take-reports)

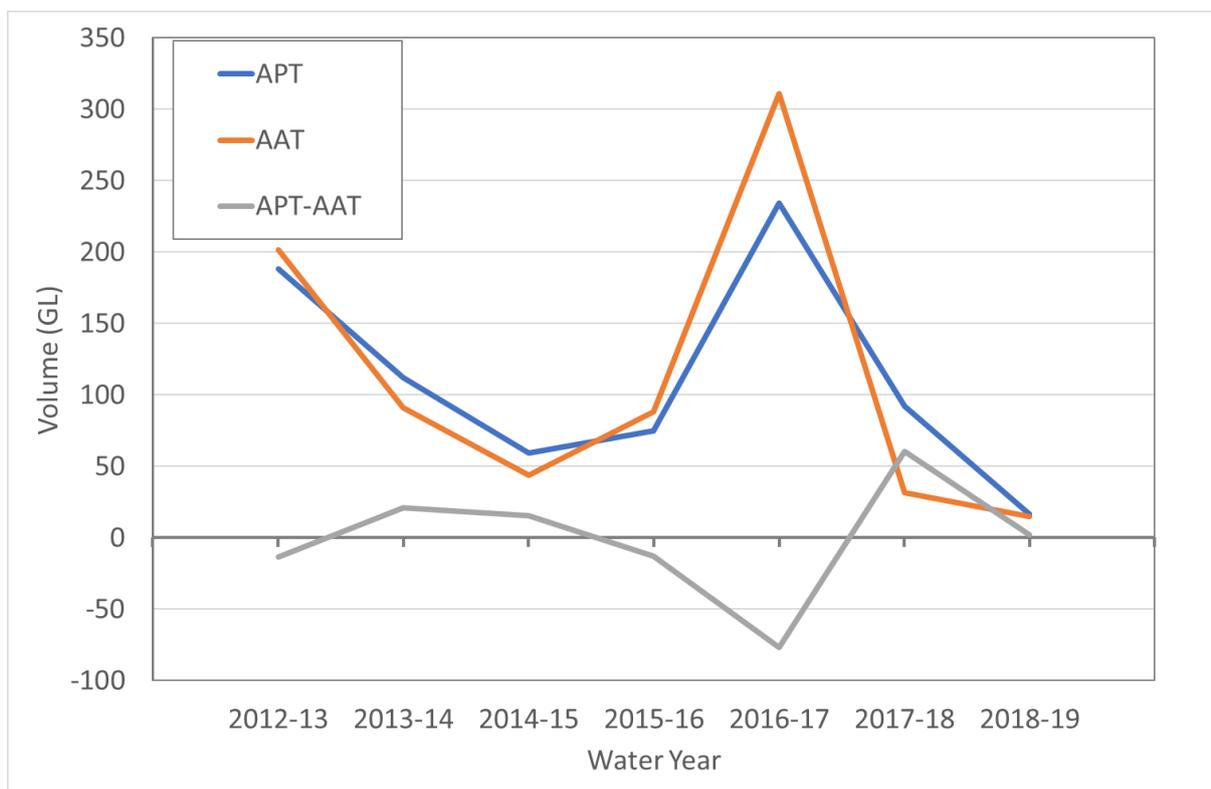


Figure 1. Barwon–Darling Watercourse analysis of diversions during the SDL transition period. APT = annual permitted take, AAT = annual actual take.

The analysis of trends in water take for the Barwon–Darling Watercourse over the seven year transition period from the trial SDL accounts²³ shows:

- The actual take varies significantly depending upon the climate i.e. wet or dry times, for example ranging from less than 15 GL in 2018–19 to approximately 300 GL in 2016–17 water year; demonstrated in Figure 1.
- There were three years over this period when annual actual take exceeded the trial annual permitted take (the 2012–13, 2015–16 and 2016–17 water years), however in two of these years, the cumulative balance remained in credit.
- In 2016–17, the actual take exceeded the trial permitted take by about 77 GL, resulting in an adjusted cumulative balance of -44GL (or -27%), which exceeded the notional SDL compliance threshold. Notably, however, take was back within the SDL in the following water year. This example illustrates the significant swings that can happen from one year to the next given the significant variation in water availability and the level of accuracy of the model. Importantly, SDL compliance is about trends over time, rather than outcomes in individual water years.
- The Barwon–Darling actual take is about 25%, on average, of the water lawfully accessible²⁴ for take over the seven year transition period.

²³ Note that there are differences between the SDL accounting methods and those used in assessing Cap compliance – therefore a direct comparison of these two data sets is not recommended.

²⁴ water lawfully accessible is the granting of permission, either annually or on a long-term basis, to take water from a water source under a form of take in a Basin state in accordance with that state’s legal frameworks for take.

- For the Barwon–Darling watercourse, the cumulative balance between permitted and actual take including adjustments is 24.3 GL in credit at the end of the seven year period 2012–19.

3.3.3 Audit and Assurance

The MDBA’s published *Audit and Assurance Work Program 2020–21*²⁵ includes reviews to assess the adequacy and effectiveness of the metering and monitoring processes in place across the Basin. The MDBA is currently undertaking an audit of the NSW non-urban water metering framework implementation and has identified work from 2021 for the Barwon–Darling Watercourse. The scope of this work is to assess the roll out of the NSW metering policy as per the Murray–Darling Basin Compliance Compact to install and use Pattern Approved meter to measure water diversions. It will focus on the specific commitment to ensure that highest risk take, including large users in the Barwon–Darling, will be accurately metered and telemetered. The Authority awaits the outcomes of this work.

3.3.4 Additional information relating to RE claim 4

No supplementary evidence was reviewed with regard to this part of the reasonable excuse claim.

3.4 Assessing long-term growth in actual take

As indicated in the MDBA’s *SDL reporting and compliance framework*, in the first year of an exceedance it is not expected that the long-term growth in actual take would be able to be assessed.

NSW has committed to monitoring take to assess whether reduced available water determinations are required in subsequent years to ensure extraction returns back to the compliance limit. It will also provide an updated report as part of the 2020–21 SDL compliance reporting.

NSW notes that it had issued entitlements that sum to the long-term Cap of ~189 GL/y with full carryover of account balances permitted. NSW suggests that growth in use is curtailed by its licencing framework, noting that while irrigators can draw on water in carryover accounts, over time they cannot take more than the expected long-term average. However, if necessary, NSW indicated that an available water determination of 70% could be made in future water years should the SDL exceedance persist. This should return the system to a zero balance within five years of normal or average conditions.

While the Authority is concerned that compliance under NSW’s water sharing plan is not being properly monitored and regularly assessed, the Authority’s review of Cap and transition period data (see section 3.3.2) does not indicate that growth in use is occurring in the Barwon–Darling Watercourse.

It is noted that:

- SDL compliance commences from 1 July 2019, after the accreditation of a WRP
- the reasons for the excess provided by NSW relate to limitations in the permitted take method

²⁵ MDBA. (2020) *Audit and Assurance Work Program 2020–21*, retrieved from [Audit and assurance | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/audit-and-assurance)

- compliance methods are still being agreed
- only one data point is available, based on the best available methods
- trends from other data sets do not indicate growth

On this basis, it is the Authority's view that a growth in use response is not required to be implemented for the 2020–21 water year, but should be reassessed when further data become available.

3.4.1 Relative risk associated with subsequent action or inaction

The following statement is in relation to the risk of applying/not applying growth in use provisions in response to the apparent SDL exceedance. While the Authority has found that NSW did not operate in a manner fully consistent with the proposed water resource plan in the 2019–20 water year and found claim the claim for reasonable excuse is not valid under the Basin Plan, it does note that the reasoning for the exceedance due to limitation in the annual permitted take method a probable cause of the excess. Analysis of past water use trends in the Barwon–Darling Watercourse indicates that this apparent exceedance is consistent with the high variability of the system and water use trends of the past, and does not – in the first year – represent conclusive evidence of growth in use.

The Authority considers that recommending implementation of growth in use provisions at this stage would be premature and the risk to Barwon–Darling Watercourse users disproportionate to the risk that the apparent exceedance represents at present. Time is required for NSW to implement the make good actions, and for further data and evidence to be gathered to better understand the issue, before action is taken.

4 Authority summary of findings

The Authority has assessed the claim for reasonable excuse by NSW and determined that the Barwon–Darling Watercourse SDL resource unit was non-compliant in the 2019–20 water year.

As part of its s 71 reporting, NSW provided its self-assessment of compliance identifying the exceedance and submitted a report setting out its understanding of the reasons for the excess and steps to bring the cumulative balance back to compliance.

While delayed relative to statutory timelines, the supporting material provided by NSW in relation to the 2019–20 water year enabled an assessment of its claim for reasonable excuse in accordance with the Water Act (s 71), the Basin Plan (Chapter 6 Part 4) and the MDBA’s *SDL reporting and compliance framework*.

The Authority has found that the Barwon–Darling Watercourse was not operated by NSW in a manner fully consistent with the proposed water resource plan in the 2019–20 water year. **On this basis the Authority does not accept NSW’s claim for reasonable excuse due to operation of the water resource plan as being valid under the Basin Plan.**

The Authority notes that there are a number of actions in relation to the measurement, management and regulation of water resources in the SDL resource unit that NSW has committed to for an extended period of time, but not yet fully implemented, that would have improved the management and regulation of water resources in the SDL resource unit. These include accreditation of the WRP, regulation of floodplain harvesting, implementation of modelling upgrades and roll out of meters that meet Australian Standards. While these inactions cannot be directly attributed to the apparent SDL exceedance in the 2019–20 water year, it is likely that their implementation can contribute to make good actions to rectify the exceedance.

A reasonable excuse was also claimed due to circumstances beyond the state’s control, due to incomplete water recovery at 1 July 2019. This applies only to the portion of the excess that is attributable to the incomplete water recovery (2 GL). In August 2020, the Authority agreed with advice from the Department of Agriculture, Water and the Environment that the incomplete water recovery in the 2019–20 water year was due to circumstances beyond NSW’s control. **The Authority accepts NSW’s claim for reasonable excuse for 2 GL due to reasons beyond a state’s control as being valid under the Basin Plan.**

In relation to the incomplete recovery, the Authority notes NSW’s statement that it continues to support Commonwealth water recovery in the Barwon–Darling Watercourse and has processed all relevant trade applications.

As indicated above **the Authority recommends that, in addition, to the “make good” actions brought forward by NSW, NSW should accelerate the implementation of Basin Plan compliance reporting in the Barwon–Darling by delivering on its previous commitments.** This includes implementing a published work plan which prioritises the timely completion of the following activities in the Barwon–Darling Watercourse SDL resource unit:

- Implement systems that enable reporting of s. 71 SDL compliance data for the end of each water year by the end of October, commencing in 2020–21
- assessing and reporting compliance with the NSW take limit (the long term average annual extraction limit – the LTAAEL), commencing with the 2020–21 water year
- accreditation and implementation of the Barwon Darling Watercourse water resource plan in the 2021–22 water year
- regulation of floodplain harvesting in the 2021–22 water year, including measurement of floodplain harvesting take from 1 July 2021
- monitor compliance by individual entitlement holders and mandate and enforce the take up of meters that meet Australian Standards (AS4747) and the NSW non-urban water metering framework
- complete the upgrade of the Barwon–Darling Watercourse model to the Source platform in a manner that ensures best practice and transparency, and harmonisation of the model with upstream tributaries by end 2023.

As all of the make good actions, both brought forward by NSW and recommended by the Authority, relate to improving the tools used to assess SDL compliance, they should be implemented regardless of future SDL compliance outcomes (i.e. regardless of whether the cumulative balance returns to zero).

Further SDL compliance data is required before a judgement can be made as to whether actual growth in use is occurring in excess of the SDL in the Barwon–Darling. The data for the 2020–21 year will be key to determining if and when a growth in use response is required to be implemented.

Appendix A: Map of SDL resource unit

The Barwon–Darling Watercourse resource unit (SS19) is shown in **Error! Reference source not found.** Note that this resource area is not associated with any land area – it is the watercourse (or the dry river bed) only.

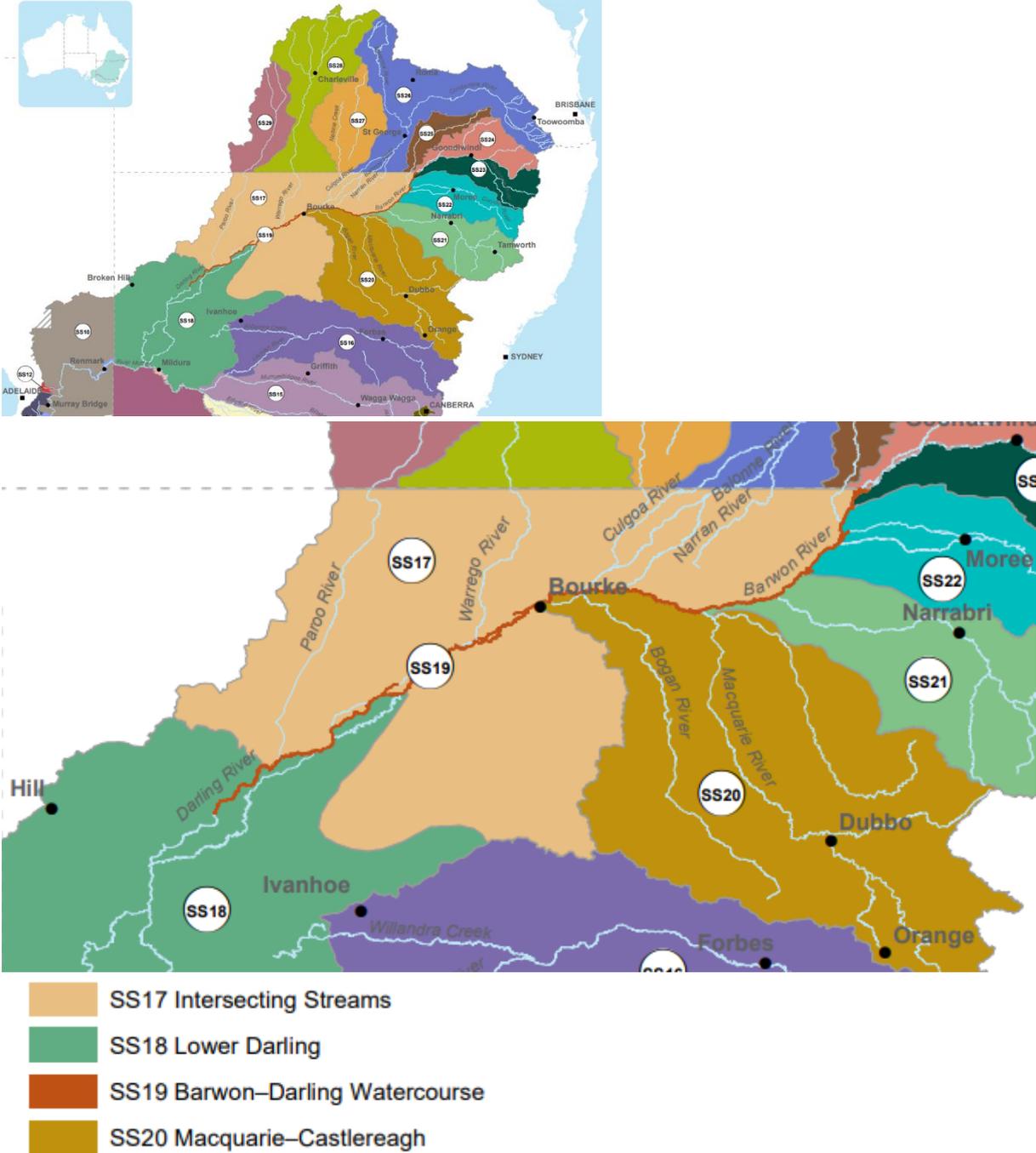


Figure 2. Location of Barwon–Darling Watercourse SDL resource unit (SS19) within the Murray Darling Basin.

Appendix B: NSW statement of compliance



Statement of Compliance water year 2019-20 New South Wales

(Statement for the purpose of s71(g) of the *Water Act 2007* (Cth) and Part 4 of Chapter 6 of the *Basin Plan 2012*)

Declaration of accuracy

The information and documentation supporting this statement of compliance for water 2019-20 is complete, true and accurate to the best of my knowledge. The section 71 reporting data provided has been collated consistent with methods set out in accredited water resource plans (or a bilateral agreement with the MDBA) and using the best available information.

Signed:

A handwritten signature in blue ink, appearing to read "G. Attenborough".

Full name: Graham Attenborough

Position title: Chief Operating Officer Water

Date

Office locations
Adelaide, Albury-Wodonga, Canberra, Goondiwindi, Griffith, Mildura, Murray Bridge, Toowoomba

 mdba.gov.au  1800 230 067  engagement@mdba.gov.au



Australian Government



Evidence to support a reasonable excuse claim

Evidence of Basin state actions from prior water year's reasonable excuse

For clarity, where a reasonable excuse was granted by the MDBA in the previous water year for any SDL resource unit, evidence of the actions required by that reasonable excuse must be provided with this statement – including where a reasonable excuse is not being claimed for this water year ([not required for 2019-20](#)).

Evidence of Basin state actions supporting a claim for reasonable excuse this water year (refer to Chapter 5.2 of the [SDL reporting and compliance framework for more detail](#))

Where Attachment A or B indicate that a reasonable excuse is being claimed further to Basin Plan s6.12(4) or s.6.12C(4) for surface water and/or groundwater, the following must be provided:

1. under claims for reasonable excuse 1 (discover), 2 (review method) or 3 (respond) where the excess has arisen within the operation of the WRP for the SDL resource unit:
 - a. any reports the Basin state has prepared in relation to compliance with accredited WRPs, in response to Matter 19 of Schedule 12 of the *Basin Plan 2012* (Cth), or
 - b. the Basin state's statement of assurance confirming that the rules in the WRP have been complied with, and
 - c. evidence that the steps required under previous reasonable excuses have been implemented (where relevant) ([not required for 2019-20](#)),
2. if reasonable excuse 1.1 or 1.2 or 1.3 was granted for any SDL resource unit for the previous water year, evidence also of the Basin state's ([not required for 2019-20](#)):
 - a. investigation of the issue, and review of the permitted take method (step 1),
 - b. review of all forms of take in the SDL resource unit (step 2), and where relevant,
 - c. test of growth in use response (step 3) (*required by the time reasonable excuse 3 is expected to be granted*), detailing (i) consultation with its water users to prepare for possible implementation of growth-in-use responses, and (ii) demonstration that its proposed growth-in-use response will be effective in bringing the SDL back in to balance,
3. if a reasonable excuse claim is being made under reasonable excuse 4 (acquit) or 5 (collaborate) (circumstances beyond a Basin state's control):
 - a. a description of the circumstances that led to the reasonable excuse claim and where appropriate, supporting evidence, and
 - b. where the water recovery is incomplete, reference to the decision made by the MDBA during the water year in question.
4. any other supporting information the Basin state chooses to provide.

2

Office locations

Adelaide, Albury-Wodonga, Canberra, Goondwindi, Griffith, Mildura, Murray Bridge, Toowoomba

mdba.gov.au

1800 230 067

engagement@mdba.gov.au



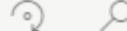
Attachment B: surface water SDL compliance self-assessment (from s71 workbook)

Office locations
Adelaide, Albury-Wodonga, Canberra, Goondiwindi, Griffith, Mildura, Murray Bridge, Toowoomba

 mdba.gov.au

 1800 230 037

 engage@mdba.gov.au



Attachment B. Surface Water SDL compliance self-assessment

Section 71 (1)(g): Long-term annual diversion limit compliance assessment

State	SDL Resource unit	SDL Resource unit code	SDL (At 01-07-2019)	Annual Permitted Take	Annual Actual Take	Annual Balance	Cumulative Balance - Start of Year	Cumulative Balance - End of Year	HEW Disposal (E to C)
			(ML)	(ML)	(ML)	(ML)	(ML)	(ML)	(ML)
NSW	Intersecting Streams	SS17	119,300	119,300	119,300	-	-	0	0
NSW	Barwon Darling Watercourse	SS19	176,228	203,064	259,909	56,845	-	-56,845	0
NSW	NSW Border Rivers	SS23	320,100	168,284	129,140	39,144	-	39,144	0
NSW	Gwydir	SS22	530,200	258,900	173,085	85,815	-	85,815	100
NSW	Namoi	SS21	490,300	320,700	280,972	39,728	-	39,728	0
NSW	Macquarie-Castlereagh	SS20	633,800	412,800	412,326	474	-	474	0
NSW	Lachlan	SS16	578,300	397,050	407,983	10,933	-	-10,933	1,050
NSW	Murrumbidgee	SS15	2,209,400	1,532,914	1,052,899	480,015	-	480,015	15,144
NSW	NSW Murray	SS14	1,512,200	607,566	493,893	113,673	-	113,673	4,137
NSW	Lower Darling	SS18	35,400	5,900	1,738	4,162	-	4,162	0

2019-20						
HEW Disposal (E to C)	HEW Acquisition (C to E)	Adjusted Cumulative Balance	Compliance % (20% of SDL)	Is a reasonable excuse being claimed? (Y / N)	Reasonable Excuse number being claimed	Indicative compliance status
(ML)	(ML)	(ML)	(ML)			
0	0	0	-23,860	N		Compliant
5	0	0	-56,845	Y	RE 1 and RE 4	Compliant
4	0	0	39,144	N		Compliant
5	100	0	85,915	N		Compliant
3	0	0	39,728	N		Compliant
4	0	0	474	N		Compliant
3	1,050	0	-9,883	N		Compliant
5	15,144	9,660	485,499	N		Compliant
3	4,137	418	117,392	N		Compliant
2	0	0	4,162	N		Compliant

* Annual permitted take and the cumulative balance have been updated in the Register of Take further to discussion with NSW

Appendix C: Information used in Authority's assessment

This assessment has been undertaken using the following documents:

- NSW Department of Planning, Industry and Environment. (2021) *Reasonable Excuse report – Barwon–Darling 2019_20 Sustainable Diversion Limit compliance*,
- NSW Department of Planning, Industry and Environment,(20XX), *Barwon Darling Watercourse Water Resource Plan*, submitted to MDBA 30/Jun/2020 retrieved from [Barwon–Darling Watercourse – Water resource plan | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/barwon-darling-watercourse-water-resource-plan)
- NSW Department of Planning, Industry and Environment. (2019) *Barwon–Darling Watercourse WRP – Modelling – Annual Permitted Take Scenario Report (update)* retrieved from [Barwon–Darling Watercourse Water Resource Plan – Annual Permitted Take Scenario Model \(mdba.gov.au\)](https://www.mdba.gov.au/barwon-darling-watercourse-water-resource-plan-annual-permitted-take-scenario-model)
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Office locations

Adelaide
Albury–Wodonga
Canberra
Goondiwindi
Griffith
Mildura
Murray Bridge
Toowoomba

 mdba.gov.au

 1800 230 067

 engagement@mdba.gov.au