

# Water (SDL Adjustments) Notice 2017

The Murray Darling Basin Authority makes the following notice.

Dated 6 December 2017

## Contents

| 1 Name   | 3  |
|--|----|
| 2 Authority  | 3  |
| 3 Interpretation   | 3  |
| 4 Background   | 3  |
| 5 Information required by section 23B of the Water Act   | 4  |
| 6 Illustrative example of proposed SDL adjustments   | 5  |
| Schedule 1 — SDLs at reference time and apportioned supply   |    |
| contributions for surface water SDL resource units   | 6  |
| Schedule 2 — Calculation of proposed SDL adjustments   | 7  |
| Part 1 — Preliminary   | 7  |
| 1 Purpose of Schedule  | 7  |
| 2 Simplified outline of this Schedule  | 7  |
| 3 Interpretation   | 8  |
| Part 2 — Calculation of SDL adjustment amount  | 8  |
| 4 Net effect of the total supply contribution and the total efficiency contribution  | 8  |
| <ul> <li>5 Calculation of SDL adjustment amounts—net effect greater than 543 GL per year</li> <li>6 Calculation of SDL adjustment amounts—net effect less than or equal to 543 GL per</li> </ul> | 9  |
| year   | 10 |
| Schedule 3 — Calculation of other amounts  | 11 |
| 1 Calculation of percentage difference for paragraph 5(2)(c) of this notice  | 11 |
| 2 Calculation of total Basin adjustment percentage for paragraph 5(3)(b) of this notice  | 11 |
| Schedule 4 — Outline of material   | 12 |
| Schedule 5 —Illustrative example of proposed SDL adjustments   | 14 |

#### 1 Name

This notice is the Water (SDL Adjustments) Notice 2017.

#### 2 Authority

This notice is made under section 23B of the Water Act 2007.

Note: This notice is not a legislative instrument. See paragraph 23B(7)(b) of the Water Act.

#### **3** Interpretation

In this notice:

*Authority* means the Murray-Darling Basin Authority within the meaning of the Water Act.

Basin Plan means the Basin Plan 2012.

proposed Basin limit has the same meaning as in subsection 23A(5) of the Water Act.

Note: See also paragraph 5(3)(a) of this notice.

reference time is the time the Basin Plan first took effect, that is, 24 November 2012.

*total Basin adjustment percentage* has the same meaning as in subsection 23A(5) of the Water Act.

Note: See also paragraph 5(3)(b) of this notice.

SDL means long-term average sustainable diversion limit.

Water Act means the Water Act 2007.

#### 4 Background

The Basin Plan

- (1) The Basin Plan is a legislative instrument made under Part 2 of the Water Act. The Basin Plan provides for the integrated management of the "Basin water resources", which are, broadly speaking, the water resources within, or beneath, the Murray-Darling Basin.
- (2) Among other things, the Basin Plan specifies "water resource plan areas", each of which contains part of the Basin water resources. Each water resource plan area consists of one or more "SDL resource units". Each SDL resource unit is either:
  - (a) a surface water SDL resource unit, identified in section 6.02 of the Basin Plan; or
  - (b) a groundwater SDL resource unit, identified in section 6.03 of the Basin Plan.

Long-term average sustainable diversion limits (SDLs)

- (3) The Basin Plan also specifies the "long-term average sustainable diversion limits", or "SDLs", for:
  - (a) the Basin water resources as a whole—see subsection 6.04(2) of the Basin Plan; and
  - (b) each SDL resource unit—see:
    - (i) subsection 6.04(3) of the Basin Plan for surface water SDL resource units; and
    - (ii) subsection 6.04(4) of the Basin Plan for groundwater SDL resource units.

(4) The SDLs are the maximum long-term annual average quantities of water that can be taken, on a sustainable basis, from the relevant water resources. In accordance with paragraph 23(2)(b) of the Water Act, SDLs have been specified in the Basin Plan as a formula that may be used to calculate a quantity of water per year.

Adjustments to long-term average sustainable diversion limits

- (5) In accordance with subsection 23A(1) of the Water Act, Part 2 of Chapter 7 of the Basin Plan provides for the Authority to propose:
  - (a) an adjustment of the SDLs for one or more surface water SDL resource units; and
  - (b) as a result of such adjustments, an adjustment of the SDL for the Basin water resources as a whole;

by an amount determined by the Authority.

- (6) In accordance with paragraph 23A(2)(a) of the Water Act, section 7.17 of the Basin Plan also includes criteria for determining:
  - (a) whether the Authority should propose such an adjustment; and
  - (b) the amount of such an adjustment.
- (7) Subsection 7.20(4) of the Basin Plan requires the proposed adjustments to be in the form of a formula as a function of time that depends on the factors specified in that subsection.

#### 5 Information required by section 23B of the Water Act

- (1) The Authority has proposed one or more adjustments of the SDLs for each surface water SDL resource unit.
- (2) For subsection 23B(2) of the Water Act, for each surface water SDL resource unit:
  - (a) the SDL that applied at the reference time is the amount given by column 2 of the table to Schedule 1 to this notice; and
  - (b) the proposed plan area limit is the sum of:
    - (i) the SDL that applied at the reference time; and
    - (ii) the SDL adjustment amount given by section 5 or section 6 of Schedule 2 to this notice, as appropriate, for the unit; and
  - (c) the amount of the difference between the limits referred to in paragraphs (a) and (b), expressed as a percentage of the amount of the limit referred to in paragraph (a), is the percentage difference calculated in accordance with section 1 of Schedule 3 to this notice; and
  - (d) an outline of the material on which the Authority based its decision in determining that the criteria referred to in paragraph 23A(2)(a) of the Water Act (see subsection 4(6) of this notice) had been met in relation to the adjustment and the amount of the adjustment is set out in Schedule 4 to this notice.
  - Note 1: Consistently with paragraph 23(2)(b) of the Water Act and subsection 7.20(4) of the Basin Plan, the amounts referred to in paragraphs (b) and (c) are expressed as formulae.
  - Note 2: The Minister has not, under subsection 23B(6) of the Water Act, previously adopted any adjustments of the SDLs for any SDL resource unit since the reference time, and so paragraph 23B(2)(d) of the Water Act is not relevant.
- (3) For subsection 23B(3) of the Water Act:
  - (a) the proposed Basin limit that is proposed as a result of the proposed adjustments referred to in subsection (1) is equal to the sum of:
    - (i) the proposed plan area limits as referred to in paragraph (2)(b) for all surface water SDL resource units; and

- (ii) the SDLs for each groundwater SDL resource unit as at the date the Basin Plan first took effect; and Note: The Basin Plan first took effect on 24 November 2012.
- (b) the total Basin adjustment percentage is the amount calculated in accordance with section 2 of Schedule 3 to this notice; and
- (c) an outline of the material on which the Authority based its decision in determining that the criteria referred to in paragraph 23A(2)(a) of the Water Act (see subsection 4(6) of this notice) had been met in relation to the adjustment, and the amount of the adjustment, of the SDL for the Basin water resources is set out in Schedule 4 to this notice.
- Note: Consistently with paragraph 23(2)(b) of the Water Act and subsection 7.20(4) of the Basin Plan, the amounts referred to in paragraphs (a) and (b) are expressed as formulae.

#### 6 Illustrative example of proposed SDL adjustments

To illustrate the effect of the proposed SDL adjustments, Schedule 5 to this notice sets out an illustrative example of how the proposed SDL adjustments might be expected to operate in the hypothetical scenario outlined in that Schedule.

## Schedule 1—SDLs at reference time and apportioned supply contributions for surface water SDL resource units

- Note 1: See paragraph 5(2)(a) of this notice, paragraph (a) of the definition of "apportioned supply contribution" in section 3 of Schedule 2 to this notice, and the definition of "SDL at reference time" in section 1 of Schedule 3 to this notice.
- Note 2: The SDL at reference time amounts are calculated in accordance with the default distribution of shared reduction amounts as set out in subsection 6.05(4) of the Basin Plan.
- Note 3: Apportioned supply contributions were determined applying re-allocation adjustment requests that were made by South Australia in relation to the South Australian Murray (SS11) and Eastern Mount Lofty Ranges (SS13) SDL resource units.

|    | Column 1   | Column 2                           | Column 3  |
|----|--|------------------------------------|---|
|    | Surface water SDL resource unit (code)             | SDL at<br>reference<br>time (GL/y) | Apportioned<br>supply<br>contribution<br>(GL/y) |
| 1  | Paroo (SS29)                                       | 9.9                                | _   |
| 2  | Warrego (SS28)                                     | 117.2                              | _   |
| 3  | Nebine (SS27)                                      | 29.9                               | _   |
| 4  | Condamine-Balonne (SS26)                           | 838.1                              | _   |
| 5  | Moonie (SS25)                                      | 82.3                               | _   |
| 6  | Queensland Border Rivers (SS24)                    | 298.5                              | _   |
| 7  | Intersecting Streams (SS17)                        | 113.8                              |   |
| 8  | Barwon-Darling Watercourse (SS19)                  | 180.9                              | _   |
| 9  | NSW Border Rivers (SS23)                           | 283.9                              | _   |
| 10 | Gwydir (SS22)                                      | 389.9                              | _   |
| 11 | Namoi (SS21)                                       | 479.0                              | _   |
| 12 | Macquarie-Castlereagh (SS20)                       | 645.4                              | _   |
| 13 | Lachlan (SS16)                                     | 570.4                              | 0.0   |
| 14 | Murrumbidgee (SS15)                                | 1,938.1                            | 162.0   |
| 15 | New South Wales Murray (SS14)                      | 1,341.7                            | 124.8   |
| 16 | Lower Darling (SS18)                               | 45.5                               | 0.0   |
| 17 | Victorian Murray (SS2)                             | 1,251.7                            | 72.8  |
| 18 | Kiewa (SS3)  | 23.3                               | 1.3   |
| 19 | Ovens (SS4)  | 80.3                               | 3.0   |
| 20 | Goulburn (SS6)                                     | 1,153.0                            | 174.5   |
| 21 | Broken (SS5)                                       | 54.6                               | 1.1   |
| 22 | Campaspe (SS7)                                     | 120.9                              | 2.6   |
| 23 | Loddon (SS8)                                       | 155.8                              | 10.9  |
| 24 | Wimmera-Mallee (surface water) (SS9)               | 105.5                              | 0.0   |
| 25 | South Australian Murray (SS11)                     | 483.1                              | 52.0  |
| 26 | South Australian Non-Prescribed Areas (SS10)       | 3.5                                | 0.0   |
| 27 | Eastern Mount Lofty Ranges (SS13)                  | 26.4                               | 0.0   |
| 28 | Marne-Saunders (SS12)                              | 2.9                                | 0.0   |
| 29 | Australian Capital Territory (surface water) (SS1) | 47.6                               | 0.0   |

## Schedule 2—Calculation of proposed SDL adjustments

Note: See paragraph 5(2)(b) of this notice.

## Part 1—Preliminary

#### 1 Purpose of Schedule

This Schedule sets out how the amount referred to in paragraph 5(2)(b) of this notice is calculated.

#### 2 Simplified outline of this Schedule

This Schedule sets out how to calculate the SDL adjustment amount of each surface water SDL resource unit for each water accounting period. The SDL adjustment amount is used to calculate the long term average sustainable diversion limit of each surface water SDL resource unit.

The SDL adjustment amount is expected to vary between water accounting periods, as:

- water access entitlements are progressively acquired in conjunction with, or to take advantage of the water savings achieved by, notified efficiency measures. Such acquisitions will be efficiency entitlements in different surface water SDL resource units, increasing the efficiency contributions in affected units; and
- the overall limitation on the size of adjustment amounts under section 7.19 operates, if applicable, in relation to a particular water accounting period.

Section 7.19 of the Basin Plan applies if, at a particular time, the net effect of the total supply contribution and the total efficiency contribution (referred to in this Schedule as the "net effect") represents an increase or a decrease of more than 5% of the total surface water SDL for the Basin water resources as it stood at the reference time. The total surface water SDL for the Basin water resources as it stood at the reference time is equal to 10,873 GL per year, and 5% of that amount is equal to 543 GL per year (when rounded down).

On the basis of the supply measures and efficiency measures that were notified to the Authority by 30 June 2017, the net effect will not represent a decrease of more than 5% of this amount. Accordingly, the formula set out in this Schedule provides for a reduction only of the supply contribution for affected units, and not of the efficiency contributions.

As efficiency contributions are expected to vary over time, the net effect is also expected to vary. Section 4 of this Schedule sets out how to assess the magnitude of the net effect.

#### Net effect greater than 543 GL per year

For water accounting periods for which the net effect exceeds 543 GL per year, SDL adjustment amounts are calculated in accordance with section 5 of this Schedule. For such water accounting periods, the formula additionally reflects the operation of the overall limit on adjustments in section 7.19 of the Basin Plan.

#### Net effect no greater than 543 GL per year

If, however, for a particular water accounting period, the net effect does not exceed 543 GL per year, the SDL adjustment amount for each surface water SDL resource unit is instead calculated in accordance with section 6 of this Schedule.

In both cases, in accordance with paragraph 7.20(4)(b) of the Basin Plan, the adjustments are expressed in the form of a formula as a function of time, changing at specified times (namely, at the beginning of each water accounting period), that reflects the changes up until 30 June 2024 of the relevant efficiency contributions.

#### **3** Interpretation

In this Schedule:

*apportioned supply contribution*, for a particular surface water SDL resource unit, means:

- (a) for a surface water SDL resource unit for which an amount is listed as the apportioned supply contribution in the table to Schedule 1 to this notice—that amount, in GL per year; and
- (b) otherwise-zero.
- Note 1: The apportioned supply contribution for a surface water SDL resource unit is the amount of the total supply contribution, worked out in accordance with sections 7.15 and 7.17 of the Basin Plan, that was apportioned to the surface water SDL resource unit in accordance with section 7.18 of the Basin Plan, disregarding the effect (if any) of section 7.19 of the Basin Plan.
- Note 2: The apportioned supply contribution for each surface water SDL resource unit is the same for each water accounting period.

*current efficiency contribution*, for a particular surface water SDL resource unit and for a particular water accounting period, means the unit's efficiency contribution (within the meaning of subsection 7.16(1) of the Basin Plan) as at the end of the first day of the water accounting period, disregarding any efficiency entitlement that might be registered on the register maintained under section 7.13 of the Basin Plan after 30 June 2024.

Note: The current efficiency contribution for a surface water SDL resource unit might vary between water accounting periods, as relevant water access entitlements are acquired.

*net effect*, for a particular water accounting period, has the meaning given by subsection 4(2) of this Schedule.

- Note 1: The net effect is the difference between the total supply contribution and the total efficiency contribution for the water accounting period under sections 7.15 to 7.17 of the Basin Plan.
- Note 2: The net effect might vary between water accounting periods as the total efficiency contribution changes with time.

*total current efficiency contribution*, for the water accounting period, is equal to the sum of the current efficiency contributions of all surface water SDL resource units.

### Part 2—Calculation of SDL adjustment amount

#### 4 Net effect of the total supply contribution and the total efficiency contribution

(1) The calculation of the SDL adjustment for each surface water SDL resource unit in a water accounting period depends on whether the net effect for that water accounting period would represent an increase of more than 5% of the total surface water SDL for the Basin water resources as it stood at the reference time.

- Note: The total surface water SDL for the Basin water resources as it stood at the reference time is 10,873 GL per year, and 5% of that amount is 543 GL per year (when rounded down).
- (2) For a particular water accounting period, the *net effect*, in GL per year, is calculated in accordance with the following formula:

(net effect) = 605 - (total current efficiency contribution)

where:

*total current efficiency contribution* has the meaning given by section 3 of this Schedule.

Note: The amount 605 GL per year is the total supply contribution.

#### 5 Calculation of SDL adjustment amounts-net effect greater than 543 GL per year

(1) This section applies if, for the water accounting period, the net effect is greater than 543 GL per year.

(2) The *SDL adjustment amount* for a particular surface water SDL resource unit for the water accounting period, in GL per year, is calculated in accordance with the following formula:

 $\binom{\text{SDL adjustment}}{\text{amount}} = \binom{\text{reduced supply}}{\text{contribution}} - \binom{\text{current efficiency}}{\text{contribution}}$ 

where:

*reduced supply contribution*, for the surface water SDL resource unit and the water accounting period, means the amount calculated in accordance with subsection (3).

*current efficiency contribution*, for the surface water SDL resource unit and the water accounting period, has the meaning given by section 3 of this Schedule.

(3) For subsection (2), the surface water SDL resource unit's *reduced supply contribution* for the water accounting period is calculated in accordance with the following formula:

$$\binom{\text{reduced supply}}{\text{contribution}} = \binom{\text{apportioned supply}}{\text{contribution}} \times \left(\frac{\binom{\text{total current}}{\text{efficiency contribution}} + 543}{605}\right)$$

where:

*apportioned supply contribution*, for the surface water SDL resource unit, has the meaning given by section 3 of this Schedule.

Note: The net effect will be greater than 543 GL per year only if the total current efficiency contribution is less than 62 GL per year.

*total current efficiency contribution* has the same meaning as in subsection 4(2) of this Schedule.

- Note 1: The amount 543 GL per year is equal to 5% of the total surface water SDL for the Basin water resources as it stood at the reference time (that amount being 10,873 GL per year) (when rounded down).
- Note 3: The amount 605 GL per year is the total supply contribution.

# 6 Calculation of SDL adjustment amounts—net effect less than or equal to 543 GL per year

- (1) This section applies if, for the water accounting period, the net effect is less than or equal to 543 GL per year.
- (2) The *SDL adjustment amount* for a particular surface water SDL resource unit for the water accounting period, in GL per year, is calculated in accordance with the following formula:

 $\binom{\text{SDL adjustment}}{\text{amount}} = \binom{\text{apportioned supply}}{\text{contribution}} - \binom{\text{current efficiency}}{\text{contribution}}$ 

where:

*apportioned supply contribution*, for the surface water SDL resource unit, has the meaning given by section 3 of this Schedule.

*current efficiency contribution*, for the surface water SDL resource unit and the water accounting period, has the meaning given by section 3 of this Schedule.

## Schedule 3—Calculation of other amounts

Note: See paragraphs 5(2)(c) and (3)(b) of this notice.

#### 1 Calculation of percentage difference for paragraph 5(2)(c) of this notice

For paragraph 5(2)(c) of this notice, the amount (the *percentage difference*) for a particular surface water SDL resource unit is given by the following formula:

 $\binom{\text{percentage}}{\text{difference}} = \frac{(\text{proposed plan area limit}) - (\text{SDL at reference time})}{(\text{SDL at reference time})} \times 100$ 

where:

*proposed plan area limit*, for the surface water SDL resource unit, is the amount given by paragraph 5(2)(b) of this notice.

*SDL at reference time*, for the surface water SDL resource unit, is the amount given by column 2 of the table to Schedule 1 to this notice.

#### 2 Calculation of total Basin adjustment percentage for paragraph 5(3)(b) of this notice

For paragraph 5(3)(b) of this notice, the total Basin adjustment percentage is given by the following formula:

 $\begin{pmatrix} \text{total Basin} \\ \text{adjustment} \\ \text{percentage} \end{pmatrix} = \left| \frac{(\text{proposed Basin limit}) - (\text{Basin reference limit})}{(\text{Basin reference limit})} \right| \times 100$ 

where:

*proposed Basin limit* is the amount calculated in accordance with paragraph 5(3)(a) of this notice.

Basin reference limit has the same meaning as in the Water Act.

- Note 1: The Basin reference limit is the SDL for the Basin water resources (including both surface water and groundwater) that applied at the reference time. The Authority estimates the Basin reference limit to be 14,207 GL per year.
- Note 2: The total Basin adjustment percentage is based on the adjusted SDLs for the Basin water resources, including both surface water and groundwater. It differs from the percentage that is calculated in accordance with section 7.19 of the Basin Plan, which takes account only of surface water.
- Note 3: Section 7.19 of the Basin Plan operates to ensure that the total Basin adjustment percentage is no more than 5%.

## Schedule 4—Outline of material

Note: See paragraphs 5(2)(d) and (3)(c) of this notice.

|   | Material   | Outline of material   |  |  |  |  |
|---|--|---|--|--|--|--|
| 1 | Benchmark conditions of<br>development for<br>assessment of the SDL<br>supply contribution,<br>Murray-Darling Basin<br>Authority, October 2017 | The <i>Benchmark conditions of development for assessment of the SDL supply contribution</i> outlines a model of a fully implemented Basin Plan. The report describes how changes were included into the Basin Plan Benchmark scenario to produce the Sustainable Diversion Limit Benchmark scenario. This represents the implementation of the Basin Plan to achieve 2,750 GL of water recovery for the environment. This model was agreed to by all Basin governments.  |  |  |  |  |
| 2 | Modelling assessment to<br>determine SDL<br>Adjustment Volume,<br>Murray-Darling Basin<br>Authority, October 2017                              | The <i>Modelling assessment to determine SDL Adjustment Volume</i> describes the implementation of the supply measures package in the modelling framework. The report explains how the model represents and assesses the supply measures to achieve maximum supply contribution. The report lists the results of three equivalence tests (ecological elements score tests, limits of change in environmental outcomes, and reliability of supply targets) to compare environmental outcomes and reliability of the Sustainable Diversion Limit Adjustment scenario to the Sustainable Diversion Limit Benchmark scenario. |  |  |  |  |
| 3 | Independent Review of<br>Hydrologic Modelling for<br>SDL Adjustment, Bewsher<br>Consulting Pty Ltd,<br>September 2017                          | The <i>Independent Review of Hydrologic Modelling for SDL Adjustment</i> details<br>the findings of the independent review of the Sustainable Diversion Limit<br>Benchmark and Adjustment scenarios. It gives a detailed evaluation of the<br>modelling framework, outlining the methodology and criteria used to assess<br>the Sustainable Diversion Limit Benchmark and Adjustment scenarios. The<br>independent audit lists a number of suggested improvements to ensure the<br>modelling framework is an appropriate representation of the system and<br>remains fit for purpose.                                     |  |  |  |  |
| 4 | Independent Expert Panel<br>Murray–Darling Basin<br>Plan SDL Limits of<br>Change Review, Davies et<br>al., September 2017                      | Prior to the Sustainable Diversion Limit adjustment determination, early<br>MDBA modelling indicated the potential for a number of limits of change<br>rules to breach. The MDBA commissioned an expert review panel to<br>undertake an independent ecological analysis of the potential breaches likely<br>to occur across several possible Sustainable Diversion Limit adjustment model<br>runs. This report outlines the independent expert panel's assessment.  |  |  |  |  |
| 5 | Advice from the Basin<br>Officials Committee   | The Basin Officials Committee has reviewed the draft determination and<br>provided its advice to the MDBA on the proposed adjustment to Sustainable<br>Diversion Limits. This includes advice from the New South Wales, Victorian<br>and South Australian governments.  |  |  |  |  |
| 6 | Summary of Public<br>Feedback: Sustainable<br>Diversion Limit<br>Adjustment Mechanism –<br>Draft Determination                                 | The Summary of Public Feedback: Sustainable Diversion Limit Adjustment<br>Mechanism Draft Determination outlines the key themes and issues raised in<br>the public submissions period held between 3 October and 3 November 2017<br>for the SDL adjustment mechanism draft determination.   |  |  |  |  |
| 7 | Project listed on the<br>register of measures on<br>the MDBA website – On<br>Farm Irrigation<br>Efficiency and Other                           | The project as listed on the register of measures on the Authority's website<br>includes details of works that could be undertaken on farm and/or off farm<br>with the participation of consumptive water users. The aim of these works is<br>to decrease the quantity of water required for one or more consumptive uses in<br>a set of surface water SDL resource units, compared with the quantity required  |  |  |  |  |

|   | Material  | Outline of material   |
|---|---|---|
|   | Water Use Efficiencies  | under the benchmark conditions of development. The water savings from<br>these efficiency works can then be transferred to the Commonwealth, forming<br>part of the Commonwealth environmental water holdings.  |
| 8 | Project listed on the<br>register of measures on<br>the MDBA website –<br>Urban or Industrial and<br>Mining areas water<br>efficiency | The project as listed on the register of measures on the Authority's website<br>includes details of works that may be undertaken in urban or industrial and<br>mining areas with the participation of consumptive water users. The aim of<br>these works is to decrease the quantity of water required for one or more<br>consumptive uses in a set of surface water SDL resource units, compared with<br>the quantity required under the benchmark conditions of development. The<br>water savings from these efficiency works can then be transferred to the<br>Commonwealth, forming part of the Commonwealth environmental water<br>holdings. |

Note: This material referred to in items 1 to 8 may be accessed through the Authority's website, https://www.mdba.gov.au.

# Schedule 5—Illustrative example of proposed SDL adjustments

#### Note: See section 6 of this notice.

For section 6 of this notice, this Schedule sets out an illustrative example of how the proposed SDL adjustments would apply based on efficiency contributions as at 1 July 2017, as if the SDLs were to apply from that date.

# These figures represent an illustrative example of the proposed SDL adjustment amounts only.

Actual SDL adjustment amounts are expected to differ from these figures, primarily as a result of the acquisition of relevant water access entitlements giving rise to efficiency contributions in one or more surface water SDL resource units, and of re-allocation adjustment requests under section 6.05 of the Basin Plan.

The actual SDL adjustments will be governed by the amendments to the Basin Plan made by the *Basin Plan Amendment (SDL Adjustments) Instrument 2017*.

In this illustrative example, the net effect of the total supply contribution and the total efficiency contribution would be 605 GL per year, greater than 543 GL per year. Accordingly, SDL adjustment amounts would be calculated in accordance with section 5 of Schedule 2 to this notice.

In the example, for each surface water SDL resource unit:

- (a) the proposed plan area limit would be the amount indicated in column 5 to the table below; and
- (b) the percentage change to the unit's SDL would be the amount indicated in column 6 of the table below.

The proposed Basin limit would be 14,750 GL per year.

The Basin reference limit is 14,207 GL per year, and so the total Basin adjustment percentage would be equal to  $(14,750 - 14,207) \times 100 \div 14,207$ , which is approximately 3.8%, less than 5%.

| Column 1                          | Column 2   | Column 3   | Column 4   | Column 5  | Column 6   |
|-----------------------------------|--|--|--|---|--|
| Surface water SDL resource unit   | SDL that applied at<br>the reference time<br>(GL/yr) | Apportioned supply<br>contribution <sup>1</sup><br>(GL/yr) | Reduced supply<br>contribution <sup>2</sup><br>(GL/yr) | Proposed plan area<br>limit <sup>3</sup><br>(GL/yr) | Amount of the<br>difference between<br>the limits referred<br>to in columns 2 and<br>5, expressed as a<br>percentage of the<br>amount of the limit<br>referred to in<br>column 2 |
| Queensland                        |  |  |  |   |  |
| Paroo (SS29)                      | 9.9  | -  | -  | 9.9   | 0.0%   |
| Warrego (SS28)                    | 117.2  | -  | -  | 117.2   | 0.0%   |
| Nebine (SS27)                     | 29.9   | -  | -  | 29.9  | 0.0%   |
| Condamine-Balonne (SS26)          | 838.1  | -  | -  | 838.1   | 0.0%   |
| Moonie (SS25)                     | 82.3   | -  | -  | 82.3  | 0.0%   |
| Queensland Border Rivers (SS24)   | 298.5  | -  | -  | 298.5   | 0.0%   |
| Queensland - total                | 1,375.9  | -  | -  | 1,375.9   | 0.0%   |
| New South Wales                   |  |  |  |   |  |
| NSW Border Rivers (SS23)          | 283.9  | -  | -  | 283.9   | 0.0%   |
| Barwon-Darling Watercourse (SS19) | 180.9  | -  | -  | 180.9   | 0.0%   |
| Intersecting Streams (SS17)       | 113.8  | -  | -  | 113.8   | 0.0%   |
| Gwydir (SS22)                     | 389.9  | -  | -  | 389.9   | 0.0%   |
| Namoi (SS21)                      | 479.0  | -  | -  | 479.0   | 0.0%   |
| Macquarie-Castlereagh (SS20)      | 645.4  | -  | -  | 645.4   | 0.0%   |
| Lachlan (SS16)                    | 570.4  | 0.0  | 0.0  | 570.4   | 0.0%   |
| Murrumbidgee (SS15)               | 1,938.1  | 162.0  | 145.4  | 2,083.5   | 7.5%   |

| Column 1                             | Column 2   | Column 3   | Column 4   | Column 5  | Column 6   |
|--------------------------------------|--|--|--|---|--|
| Surface water SDL resource unit      | SDL that applied at<br>the reference time<br>(GL/yr) | Apportioned supply<br>contribution <sup>1</sup><br>(GL/yr) | Reduced supply<br>contribution <sup>2</sup><br>(GL/yr) | Proposed plan area<br>limit <sup>3</sup><br>(GL/yr) | Amount of the<br>difference between<br>the limits referred<br>to in columns 2 and<br>5, expressed as a<br>percentage of the<br>amount of the limit<br>referred to in<br>column 2 |
| Lower Darling (SS18)                 | 45.5   | 0.0  | 0.0  | 45.5  | 0.0%   |
| New South Wales Murray (SS14)        | 1,341.7  | 124.8  | 112.0  | 1,453.7   | 8.3%   |
| NSW – total                          | 5,988.6  | 286.8  | 257.4  | 6,246.0   | 4.3%   |
| Victoria                             |  |  |  |   |  |
| Kiewa (SS3)                          | 23.3   | 1.3  | 1.2  | 24.5  | 5.0%   |
| Ovens (SS4)                          | 80.3   | 3.0  | 2.7  | 83.0  | 3.4%   |
| Broken (SS5)                         | 54.6   | 1.1  | 1.0  | 55.6  | 1.8%   |
| Goulburn (SS6)                       | 1,153.0  | 174.5  | 156.6  | 1,309.6   | 13.6%  |
| Campaspe (SS7)                       | 120.9  | 2.6  | 2.3  | 123.2   | 1.9%   |
| Loddon (SS8)                         | 155.8  | 10.9   | 9.8  | 165.6   | 6.3%   |
| Victorian Murray (SS2)               | 1,251.7  | 72.8   | 65.3   | 1,317.0   | 5.2%   |
| Wimmera-Mallee (surface water) (SS1) | 105.5  | 0.0  | 0.0  | 105.5   | 0.0%   |
| Victoria – total                     | 2,945.1  | 266.2  | 238.9  | 3,184.0   | 8.1%   |
| South Australia                      |  |  |  |   |  |
| Eastern Mount Lofty Ranges (SS13)    | 26.4   | 0.0  | 0.0  | 26.4  | 0.0%   |
| South Australian Murray (SS11)       | 483.1  | 52.0   | 46.7   | 529.8   | 9.7%   |

| Column 1   | Column 2   | Column 3   | Column 4   | Column 5  | Column 6   |
|--|--|--|--|---|--|
| Surface water SDL resource unit                    | SDL that applied at<br>the reference time<br>(GL/yr) | Apportioned supply<br>contribution <sup>1</sup><br>(GL/yr) | Reduced supply<br>contribution <sup>2</sup><br>(GL/yr) | Proposed plan area<br>limit <sup>3</sup><br>(GL/yr) | Amount of the<br>difference between<br>the limits referred<br>to in columns 2 and<br>5, expressed as a<br>percentage of the<br>amount of the limit<br>referred to in<br>column 2 |
| South Australian Non-Prescribed Areas (SS10)       | 3.5  | 0.0  | 0.0  | 3.5   | 0.0%   |
| Marne-Saunders (SS12)                              | 2.9  | 0.0  | 0.0  | 2.9   | 0.0%   |
| South Australia - total                            | 515.9  | 52.0   | 46.7   | 562.6   | 9.0%   |
| ACT  |  |  |  |   |  |
| Australian Capital Territory (surface water) (SS1) | 47.6   | 0.0  | 0.0  | 47.6  | 0.0%   |
| ACT - total  | 47.6   | 0.0  | 0.0  | 47.6  | 0.0%   |
| Total  | 10,873   | 605  | 543  | 11,416  | 5%   |

#### Notes:

- 1 Apportioned supply contributions were determined applying re-allocation adjustment requests that were made by South Australia in relation to the South Australian Murray (SS11) and Eastern Mount Lofty Ranges (SS13) SDL resource units.
- 2 The Authority's estimate of the total efficiency contribution that could be achieved is 450 GL. Noting that the efficiency contribution is only considered when an entitlement has been registered as being available, this example has been prepared using zero efficiency entitlements for illustrative purposes only. Therefore, the reduced supply contribution would operate to limit the increase to the SDL to the maximum allowable of 5% or 543 GL/yr.
- 3 The proposed plan area limit may vary from this as efficiency contributions result in efficiency entitlements becoming available. When these become available, it will alter the proposed SDL shown in this table. The proposed plan area limit also does not take account of other adjustments that might be made after the reference time, such as re-allocation adjustment requests that might be made under subsection 6.05(5) of the Basin Plan.