



New South Wales

# **Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016**

under the

Water Management Act 2000

I, Niall Blair, the Minister for Lands and Water, in pursuance of section 50 of the *Water Management Act 2000*, do, by this Order, make the following Minister's Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources.

Dated this 29th day of June 2016.

**NIALL BLAIR, MLC**  
**Minister for Lands and Water**

## **Explanatory note**

This Order is made under section 50 of the *Water Management Act 2000*.

The object of this Order is to make the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016*. The concurrence of the Minister for the Environment was obtained prior to the making of this Order.

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# Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016

## Part 1 Introduction

**Note.** Part 12 allows for amendments to be made to this Part.

### 1 Name of Plan

This Plan is the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016 (this Plan)*.

### 2 Nature and status of Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000 (the Act)*.
- (2) This Plan is a plan for water sharing and generally deals with the matters set out in sections 20 and 21 of the Act, as well as other sections of the Act.

**Note.** Where a provision of this Plan is made under another section of the Act, the section is referred to in the notes to this Plan.

### 3 Commencement

This Plan commences on 1 July 2016.

**Notes.**

- 1 This Plan replaces the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003*.
- 2 In accordance with section 43 of the Act as it currently stands, this Plan will have effect for 10 years from 1 July 2016. The Minister may extend this Plan for a further period of 10 years after it is due to expire, in accordance with section 43A of the Act.
- 3 Under the *Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin* and the associated *National Partnership Agreement*, NSW has agreed to develop water resource plans for Murray-Darling Basin water resources that are consistent with the requirements of the Commonwealth's Basin Plan 2012. The water resource plan for the New South Wales Murray Lower Darling area is scheduled to commence on 1 July 2019. In order to make a water resource plan that commences by this date, amendments to the Act may be required to enable this Plan to be replaced prior to the end of its 10-year term.

### 4 Application of Plan

- (1) This Plan applies to the water sources known as the New South Wales Murray Regulated River Water Source and the Lower-Darling Regulated River Water Source (*these water sources*) within the Lower Murray Darling Water Management Area.

**Note.** The Lower Murray Darling Water Management Area was constituted by Ministerial order made under section 11 of the Act and published in the NSW Government Gazette No 180 on 23 November 2001 at page 9389.

- (2) The New South Wales Murray Regulated River Water Source (*the Murray Water Source*) includes all water:
- (a) between the banks of all rivers, from the upper limit of Hume Dam water storage, and from the Darling River at the north east corner of Lot 11 DP 756952, Parish of Merche, County of Wentworth, downstream to the South Australian border, which have been declared by the Minister to be regulated rivers, and
  - (b) taken under a floodplain harvesting (regulated river) access licence with a share component that specifies the Murray Water Source.
- (3) The Lower-Darling Regulated River Water Source (*the Lower Darling Water Source*) includes all water:
- (a) between the banks of all rivers, from the upper limit of the Lake Wetherell water storage downstream to the upstream limit of the Wentworth Weir Pool water storage, which have been declared by the Minister to be regulated rivers, and
  - (b) taken under a floodplain harvesting (regulated river) access licence with a share component that specifies the Lower Darling Water Source.
- (4) This Plan applies to the water distributed to New South Wales (NSW) under Part XII of the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth.

**Notes.**

- 1 A **regulated river** is a river that has been declared by the Minister, by order published in the New South Wales Government Gazette, to be a regulated river.
- 2 Rivers declared to be regulated rivers by the regulated river order as at the commencement of this Plan are listed in Appendix 1.
- 3 An overview map of these water sources is shown in Appendix 2.
- 4 The NSW share of the waters of the Murray Water Source is subject to the water accounting and other arrangements that arise from the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth.
- 5 **Floodplain harvesting** is defined in the Dictionary.

## **5 Understanding the rules in this Plan**

This Plan contains various rules. Where appropriate, the rules specified in this Plan are given effect by the mandatory conditions for access licences and water supply work approvals contained in Part 11 of this Plan.

## **6 Interpretation**

- (1) Words and expressions that are defined in the Dictionary to this Plan have the meaning set out in the Dictionary.
- (2) Unless otherwise defined in this Plan, words and expressions that are defined in the Act or in the regulations made under the Act have the same meaning in this Plan.
- (3) Unless otherwise specified in this Plan, a clause that applies to a category of access licence also applies to any subcategories of that category of access licence.
- (4) The Dictionary and Schedules to this Plan form part of this Plan.
- (5) Notes in the text of this Plan do not form part of this Plan.
- (6) Appendices to this Plan do not form part of this Plan.

## **Part 2 Vision, objectives, strategies and performance indicators**

**Note.** This Part is made in accordance with section 35 (1) of the Act.

### **7 Vision statement**

The vision for this Plan is to provide for:

- (a) the health and enhancement of these water sources and their water dependent ecosystems, and
- (b) the productive and economically efficient use of water resources, and
- (c) the social and cultural benefits to urban and rural communities that result from the sustainable and efficient use of water.

### **8 Acknowledgement**

Respect is paid to the traditional owners of this country, who are acknowledged as the first natural resource managers within these water sources.

### **9 Environmental objectives, strategies and performance indicators**

- (1) The environmental objectives of this Plan are to:
  - (a) maintain and enhance the ecological condition of these water sources and their dependent ecosystems (instream, riparian and floodplain ecosystems) over the long term, and  
**Note.** The ecological condition of these water sources includes high ecological value aquatic ecosystems and key ecosystem functions.
  - (b) contribute to the maintenance and enhancement of downstream processes and habitats including in downstream water sources, and
  - (c) contribute to the maintenance and enhancement of the water quality of these water sources and downstream water sources.
- (2) The environmental strategies of this Plan are to:
  - (a) manage extraction within the long-term average annual extraction limit thereby maintaining all water in excess of the long-term average annual extraction limit for the environment, and

**Note.** The application of the long-term average annual extraction limit and the assessment and compliance rules in Division 1 of Part 7 of this Plan reserve all water remaining above the long-term average annual extraction limit for the environment.

- (b) mitigate alterations to natural flow regimes in these water sources, and

**Note.** The rules in clause 55 (5) mitigate alterations to natural flow regimes in these water sources by permitting a supplementary water event to occur once all requirements for planned environmental water have been met. The rules in Division 1 of Part 6 detail environmental water allowances and their implementation.

- (c) maintain hydrological connectivity between these water sources and wetlands associated with these water sources, and

**Note.** Hydrological connectivity is maintained as a joint activity between jurisdictions. The guidelines in the *Operational guidelines for delivering flows prescribed by the Murray-Darling Basin Agreement* (reproduced in Appendix 3 of this Plan) provide guidance on the NSW Government's contribution to this strategy. The *Murray-Darling Basin Agreement* is Schedule 1 of the *Water Act 2007* of the Commonwealth.

- (d) support environmental events in the wetlands connected to these water sources such as bird breeding, fish passage and weed management, and

**Note.** The rules in Divisions 1 and 2 of Part 6 of this Plan ensure that an environmental water allowance is maintained to support environmental events for which environmental allowance water can be released.

- (e) contribute to critical downstream environmental and water quality events, and

**Notes.**

- 1 The rule in clause 31 (3) seeks to minimise blue green algal events in the Lower Darling Water Source.
- 2 The guidelines in the *Operational guidelines for delivering flows prescribed by the Murray-Darling Basin Agreement* in Schedule 1 of the *Water Act 2007* of the Commonwealth (reproduced in Appendix 3 of this Plan) provide guidance on the NSW Government's contribution to critical downstream management. They are to be implemented in a way that does not contradict Part 5 of the Murray-Darling Basin Agreement.

- (f) minimise the impact of the river regulation and water extraction on the environment in these water sources and the wetlands associated with these water sources.

**Note.** The rules in clause 33 minimise the impact of water delivery and channel capacity constraints.

- (3) The environmental performance indicator for this Plan is the extent to which the rules and strategies in this Plan have contributed to meeting the environmental objectives in subclause (1) over its term.

- (4) The performance indicator in subclause (3) will be assessed by:

- (a) comparing the ecological condition of these water sources at the
-

commencement of this Plan and at the expiration of this Plan by measuring the change in factors including:

- (i) condition indicators in these water sources, which may include changes in:
  - (A) the diversity of ecological communities, reproductive success of key species and the habitat or recorded range of fish, macroinvertebrates or vegetation, or
  - (B) geomorphology, including evidence of fine sediment scour and increased instream habitat diversity, or
  - (C) the river condition index of key river reaches,
- (ii) the hydrological regime for these water sources, including low, moderate and high flows, and
- (b) considering the extent to which changes in the ecological condition of these water sources can be attributed to the rules and strategies in this Plan.

## 10 Economic objectives, strategies and performance indicators

- (1) The economic objectives of this Plan are to:
  - (a) support viable and sustainable water dependent industries over the long term, and
  - (b) encourage economic efficiency in the management and use of water.
- (2) The economic strategies of this Plan are to:
  - (a) provide a stable and predictable framework for sharing water among individual licence holders and different categories of access licences, and  
**Note.** The available water determination rules in Division 2 of Part 7 of this Plan and the rules for managing access licences in Part 9 of this Plan provide certainty in how water will be shared between different categories of access licence.
  - (b) provide flexibility for licence holders to use water in a way that reflects the reliability characteristics of their access licence category, and  
**Note.** The individual account management rules, including the limit to the volume of water that can be credited to a regulated river (general security) access licence account in clause 52 provide flexibility that reflects the characteristics of the licence category.
  - (c) establish a long-term average annual extraction limit and rules for managing

extractions within that extraction limit that recognise different climatic conditions in different years, and

**Note.** The application of the long-term average annual extraction limit and the assessment and compliance rules in Part 7 of this Plan manage extractions to different climatic conditions in different years.

- (d) provide opportunities for market-based trading of water within environmental and system constraints.

**Note.** The rules in Part 10 of this Plan permit a variety of dealings within environmental and system constraints, including permanent trade of water access licences, trade of water allocations and ability to move a water access licence from one location to another.

- (3) The economic performance indicator for this Plan is the extent to which the rules and strategies in this Plan have contributed to meeting the economic objectives in subclause (1) over its term.

- (4) The performance indicator in subclause (3) will be assessed by:

- (a) comparing economic benefits of water extraction and use at the commencement of this Plan and at the expiration of this Plan by measuring factors including:

- (i) the change in regional gross margins versus annual total extractions based on benchmarks established at the commencement of this Plan,
- (ii) the movement of water to higher value uses,
- (iii) the change in unit price of water that is subject to a dealing,
- (iv) the annual total volume of access licence share component that is subject to a dealing, and

- (b) considering the extent to which changes in the economic benefits of water extraction and use specified in paragraph (a) can be attributed to the rules and strategies in this Plan.

## **11 Social and cultural objectives, strategies and performance indicators**

- (1) The social and cultural objectives of this Plan are to:

- (a) foster the social and cultural benefits of the sustainable and efficient use of water, and
- (b) recognise spiritual, social, customary and economic values of water to Aboriginal people.
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- (2) The social and cultural strategies of this Plan are to:
- (a) provide water for basic human needs including domestic and stock purposes,  
and  
**Note.** The rules for the maintenance of water supply in Part 6 of this Plan ensure that water is available for basic human needs including domestic and stock purposes.
  - (b) provide opportunities for Aboriginal people to access water, and  
**Note.** The rules in Part 8 of this Plan provide opportunities for Aboriginal people to access water by allowing for the granting of an access licence of the subcategory "Aboriginal cultural".
  - (c) support water-dependent Aboriginal cultural values within these water sources,  
and
  - (d) minimise the impact of water delivery on the community.  
**Note.** The following rules in Part 6 of this Plan minimise the impact of water delivery on the community:
    - (a) rules for water delivery and channel capacity constraints,
    - (b) rules for priority of extractions for access licences,
    - (c) rules for dam operation during floods and spills.
- (3) The social and cultural performance indicator for this Plan is the extent to which the rules and strategies in this Plan have contributed to meeting the social and cultural objectives in subclause (1) over its term.
- (4) The performance indicator in subclause (3) will be assessed by:
- (a) comparing the social and cultural uses of water at the commencement of this Plan and at the expiration of this Plan by measuring factors including:
    - (i) the extent to which domestic and stock rights have been met,
    - (ii) the extent to which native title rights have been met,
    - (iii) the extent of recognition of spiritual, social and customary values of water to Aboriginal people,
    - (iv) the extent to which local water utility access licence requirements have been met, and
  - (b) considering the extent to which changes in the social and cultural use of water can be attributed to the rules and strategies in this Plan.

## **Part 3 Bulk access regime**

### **12 Bulk access regime**

- (1) This Plan establishes a bulk access regime for the extraction of water under access licences in these water sources, having regard to:
  - (a) the environmental water rules established under Part 4 of this Plan, and
  - (b) the requirements for water for basic landholder rights identified in Division 2 of Part 5 of this Plan, and
  - (c) the requirements for water for extraction under access licences identified in Division 3 of Part 5 of this Plan, and
  - (d) the access licence dealing rules established under Part 10 of this Plan.
- (2) The bulk access regime established in this Plan for these water sources:
  - (a) recognises and is consistent with the limits to the availability of water set in relation to these water sources contained in Division 1 of Part 7 of this Plan, and
  - (b) establishes rules, according to which access licences are to be granted and managed, contained in Parts 8 and 9 of this Plan and available water determinations to be made contained in Division 2 of Part 7 of this Plan, and
  - (c) recognises the effect of climatic variability on the availability of water as described in clause 13, and
  - (d) establishes rules with respect to the priorities according to which water allocations are to be adjusted as a consequence of any reduction in the availability of water due to an increase in average annual extraction against the long-term average annual extraction limit contained in Division 1 of Part 7 of this Plan, and
  - (e) contains provisions with respect to the conditions that must be imposed as mandatory conditions on access licences contained in Division 2 of Part 11 of this Plan, and
  - (f) recognises and is consistent with the water management principles set out in section 5 of the Act.

### 13 Climatic variability

This Plan recognises the effects of climatic variability on river flow in these water sources by having provisions that:

- (a) manage the sharing of water in these water sources within the limits of water availability on a long-term average annual basis and the priorities according to which water allocations are to be adjusted as a consequence of any reduction in the availability of water due to an increase in the average annual extraction against the long-term average annual extraction limit, contained in Division 1 of Part 7 of this Plan, and
- (b) manage the sharing of water between categories of access licences on an annual basis in these water sources through the available water determination rules as specified in Division 2 of Part 7 of this Plan.

**Note.** Other statutory tools are available to manage for climatic variability within a water source, for example, temporary water restrictions under section 324 of the Act.

## Part 4 Planned environmental water provisions

**Note.** This Part is made in accordance with sections 8, 8A and 20 of the Act.

### 14 General

This Part contains environmental water rules for the commitment, identification, establishment and maintenance of planned environmental water in these water sources.

**Note.** In accordance with the Act, **planned environmental water** is water that is committed by management plans for fundamental ecosystem health or other specified environmental purposes, either generally or at specified times or in specified circumstances and that cannot, to the extent committed, be taken or used for any other purpose.

### 15 Commitment and identification of planned environmental water

Water is committed and identified as planned environmental water in these water sources in the following ways:

- (a) by reference to the commitment of the physical presence of water in these water sources,
- (b) by reference to the long-term average annual commitment of water as planned environmental water,
- (c) by reference to the water that is not committed after the commitments to basic landholder rights and for sharing and extraction under any other rights have been met.

### 16 Establishment and maintenance of planned environmental water

- (1) Planned environmental water is established in these water sources as follows:
  - (a) it is the physical presence of water in these water sources that results from:
    - (i) the environmental water allowances for these water sources as specified in Divisions 1 and 2 of Part 6, and
    - (ii) the limitations on access to flows for supplementary water access licences as specified in clause 54 of this Plan,
  - (b) it is the long-term average annual commitment of water as planned environmental water in these water sources that results from the application of

the long-term average annual extraction limit and compliance rules as specified in Division 1 of Part 7 of this Plan and the available water determination rules as specified in Division 2 of Part 7 of this Plan,

**Note.** The rules in Part 7 of this Plan ensure that there will be water remaining in these water sources over the long term by maintaining compliance with the long-term average annual extraction limit. The rules in Part 7 of this Plan provide for a reduction in available water determinations when the long-term average annual extraction limit has been assessed to have been exceeded.

- (c) it is the water remaining in these water sources after water has been taken pursuant to basic landholder rights and access licences, in accordance with the rules specified in Parts 7 and 9 of this Plan.
- (2) The planned environmental water established under subclause (1) (a) is maintained in these water sources by the environmental water allowance and release rules as specified in Divisions 1 and 2 of Part 6 and the limitations on access to flows for supplementary water access licences as specified in clause 54.
- (3) The planned environmental water established under subclause (1) (b) is maintained in these water sources by the application of the long-term average annual extraction limit and compliance rules as specified in Division 1 of Part 7 of this Plan and the available water determinations as specified in Division 2 of Part 7 of this Plan.
- (4) The planned environmental water established under subclause (1) (c) is maintained in these water sources by the rules specified in Parts 7 and 9 of this Plan.

## Part 5 Requirements for water

### Division 1 General

#### 17 Application

- (1) This Part identifies the requirements for water from these water sources for basic landholder rights (Division 2) and for extraction under access licences (Division 3).
- (2) The volumes of water specified in this Part represent the estimated water requirements of persons entitled to basic landholder rights in these water sources and the total volumes or unit shares specified in the share components of all access licences in these water sources. The actual volumes of water available for extraction in these water sources at any time will depend on factors such as climatic variability, access licence priority and the rules in this Plan.
- (3) This Plan recognises that basic landholder rights in these water sources and the total share components of all access licences authorised to extract water from these water sources may change during the term of this Plan. This Plan manages such changes by having provisions that manage the sharing of water within the limits of water availability, as provided for in Division 1 of Part 7 of this Plan.

**Note.** The total share components of access licences in these water sources may change during the term of this Plan as a result of:

- (a) the grant, surrender or cancellation of access licences in these water sources, or
- (b) the variation of local water utility licences under section 66 of the Act.

### Division 2 Requirements for water for basic landholder rights

#### 18 Domestic and stock rights

At the commencement of this Plan, the water requirements of persons entitled to domestic and stock rights in these water sources are estimated to total 2,381 megalitres per year (*ML/year*) distributed as follows:

- (a) 1,936 ML/year in the Murray Water Source,
- (b) 445 ML/year in the Lower Darling Water Source.

**Notes.**

- 1 Domestic and stock rights are set out in Division 1 of Part 1 of Chapter 3 of the Act and
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must be exercised in accordance with any mandatory guidelines established under the Act with respect to the taking and use of water for domestic consumption or stock watering. The figures for these rights listed in this clause do not refer to licensed volumes.

- 2 Inherent water quality and land use activities may make the water in some areas unsuitable for human consumption. Water from these water sources should not be consumed without first being tested and, if necessary, appropriately treated. Such testing and treatment is the responsibility of the water user.

## 19 Native title rights

At the commencement of this Plan, there are no native title rights in these water sources. Therefore the water requirements for native title rights are 0 ML/year.

**Note.** A change in native title rights may occur pursuant to the provisions of the *Native Title Act 1993* of the Commonwealth.

## Division 3 Requirements for water for extraction under access licences

### Notes.

- 1 The share component estimates in Division 3 of Part 5 of this Plan include volumes for licensed environmental water. The Environmental Water Register established and maintained by the Department provides a record of environmental water licences planned environmental water rules and adaptive environmental water plans approved by the Minister. The register can be accessed from <http://ewr.water.nsw.gov.au/ewr/main/ewrHome>.
- 2 Under the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003*, the following adaptive environmental water licences are held by the Minister for the Environment:
  - a a regulated river (conveyance) access licence (WAL9422) with a share component of 30,000 unit shares,
  - b a regulated river (high security) access licence (WAL9423) with a share component of 2,027 unit shares.
- 3 The water access licence referred to in Note 2a is a consequence of the Murray Irrigation Limited privatisation arrangements.
- 4 The water access licence referred to in Note 2b is the result of savings from works installed to regulate inflows to Moira Lake.

## 20 Share components of domestic and stock access licences

It is estimated that at the time of commencement of this Plan the share components of domestic and stock access licences authorised to take water from these water sources total 18,472 ML/year, distributed as follows:

- (a) 17,102 ML/year in the Murray Water Source,
- (b) 1,370 ML/year in the Lower Darling Water Source.

## **21 Share components of local water utility access licences**

It is estimated that at the time of commencement of this Plan the share components of local water utility access licences authorised to take water from these water sources total 43,632 ML/year, distributed as follows:

- (a) 33,497 ML/year in the Murray Water Source,

**Note.** Subclause (1) (a) does not include local water utility access licence entitlements for the towns of Berrigan, Finley, Wakool and Bunaloo which total 3,828 ML/year. These licensed requirements are met from water supplies delivered to Murray Irrigation Limited.

- (b) 10,135 ML/year in the Lower Darling Water Source.

## **22 Share components of regulated river (high security) access licences**

It is estimated that at the time of commencement of this Plan the share components of regulated river (high security) access licences authorised to take water from these water sources total 199,331 unit shares, distributed as follows:

- (a) 191,698 unit shares in the Murray Water Source,

- (b) 7,633 unit shares in the Lower Darling Water Source.

## **23 Share component of regulated river (conveyance) access licences**

It is estimated that at the time of commencement of this Plan the share components of regulated river (conveyance) access licences authorised to take water from the Murray Water Source total 330,000 unit shares.

## **24 Share components of regulated river (general security) access licences**

It is estimated that at the time of commencement of this Plan the share components of regulated river (general security) access licences authorised to take water from these water sources total 1,750,325 unit shares, distributed as follows:

- (a) 1,672,226 unit shares in the Murray Water Source,

- (b) 78,099 unit shares in the Lower Darling Water Source.

**Note.** Of the share components of regulated river (general security) access licences in the Lower Darling Water Source, 47,800 are owned by the Water Administration Ministerial Corporation.

## **25 Share components of supplementary water access licences**

It is estimated that at the time of commencement of this Plan the volume of

supplementary water access licences authorised to take water from these water sources total 502,579 unit shares, distributed as follows:

- (a) 252,579 unit shares in the Murray Water Source,
- (b) 250,000 unit shares in the Lower Darling Water Source.

## Part 6 System operation rules

### Notes.

- 1 This Part is made in accordance with section 21 (e) of the Act.
- 2 Under the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth, the waters of the Murray River are shared among NSW, Victoria and South Australia. The Murray-Darling Basin Authority is responsible for implementing the Murray-Darling Basin Agreement on behalf of the three states. The Murray-Darling Basin Authority also oversees the operation of the infrastructure that supplies water to the three states under the Murray-Darling Basin Agreement, except under specific circumstances, such as when NSW operates Menindee Lakes when the volume of stored water falls below 480,000 megalitres (*ML*). The rules in this Part apply to NSW's management of its share of the shared water resources and to the operation of water supply infrastructure that is within NSW control.

### Division 1 Environmental water rules in the Murray Water Source

**Note.** At the commencement of this Plan the NSW Office of Environment and Heritage (**OEH**) is responsible for managing environmental water allowances established under water sharing plans. OEH also administers and supports Environmental Water Advisory Groups (**EWAGs**) to inform the management of environmental water allowances and licensed environmental water (Division 3, Part 5), including providing advice to the Minister. Information on EWAGs is available from OEH's website at [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au).

### 26 Environmental water allowances in the Murray Water Source

- (1) The following environmental water allowances must be maintained in the Murray Water Source:
  - (a) a Barmah-Millewa Environmental Water Allowance (*the Barmah-Millewa Allowance*),

**Note.** The management of the Barmah-Millewa Allowance is a shared NSW and Victorian responsibility. These rules outline the obligation of NSW in the management of the Barmah-Millewa Allowance.
  - (b) a Barmah-Millewa Overdraw Environmental Water Allowance (*the Barmah-Millewa Overdraw*),
  - (c) a NSW Murray Regulated River Water Source Additional Environmental Water Allowance (*the Murray Additional Allowance*).
- (2) Separate accounts are to be maintained setting out the volumes credited to, released from and debited from the Barmah-Millewa Allowance, the Barmah-Millewa Overdraw and the Murray Additional Allowance.

### 27 Barmah-Millewa Allowance

- (1) Subject to subclause (2), the following volumes of water must be credited to the

Barmah-Millewa Allowance:

- (a) 50,000 ML multiplied by the percentage of the seasonal allocation for Victorian high reliability water shares in the Murray Water Source, any time a seasonal allocation is made, minus the volume of the Barmah-Millewa Overdraw released in the preceding water year under subclause (7),

**Note.** High reliability water share is the high security component of Victorian water licences low reliability water share is a lower security component.

- (b) a further 25,000 ML in the month in Column 1 of Table A when the total natural inflow to Hume Reservoir reaches the trigger in Column 3 of Table A over the preceding period of months in Column 2 of Table A.

**Table A — Triggers for crediting the Barmah-Millewa Allowance**

Column 1 Month	Column 2 Preceding period (months)	Column 3 Trigger (gigalitres)
1 July	30	8650
1 August	31	8988
1 September	32	9243
1 October	33	9253
1 November	34	9267
1 December	35	9280

**Note.** Natural inflows to Hume Reservoir are the inflows that would have occurred to Hume Reservoir but for the influence of Dartmouth Dam and the Snowy Mountains Hydroelectric Scheme. Natural inflows to Hume Reservoir are calculated by water balance and are adjusted for the net impact of the Snowy Mountains Hydroelectric Scheme and impoundments and losses in Dartmouth.

- (2) If water is credited to the Barmah-Millewa Allowance under subclause (1) (b) in July, and the total natural inflow to Hume Reservoir does not reach the trigger in Column 3 of Table A for August over the preceding period of months in Column 2 of Table A, then the volume of water in the Barmah-Millewa Allowance must be reduced by an amount equal to the credit made in July.

**Note.** Any allocation made in July under subclause (1) (b) is preliminary only and made to ensure sufficient resources are reserved for subsequent formal allocation. If the trigger is exceeded only in July, then no allocation is made. However, if the trigger is exceeded in any of the months from August to December, the allocation is made even if the trigger is exceeded in only one month.

- (3) Water must be taken from the Barmah-Millewa Allowance and made available to the access licences in the Murray Water Source whenever the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source during the water year is less than the total volume required to achieve a target water availability:
- (a) equal to 0.3 ML multiplied by the total number of unit shares specified in share components of all regulated river (general security) access licences in the Murray Water Source, or
  - (b) equal to 0.5 ML multiplied by the total number of unit shares specified in share components of all regulated river (general security) access licences in the Murray Water Source if there are exceptional circumstances.
- (4) For the purposes of subclause (3) (b), *exceptional circumstances* are defined as occurring when the average November water availability for the four years up to, and including, the current water year would otherwise have been less than 0.5 ML multiplied by the total number of unit shares for all regulated river (general security) access licences in the Murray Water Source. However, exceptional circumstances will not occur if they occurred in the previous water year. For the purposes of this clause the average November water availability is:
- (a) the sum of available water determinations for regulated river (general security) access licences, plus
  - (b) the water carried over in regulated river (general security) access licence water allocation accounts from the previous water year
- as at 30th November in the Murray Water Source.
- (5) The volume of water taken from the Barmah-Millewa Allowance under subclause (3) must be the lesser of:
- (a) the volume necessary to permit further available water determinations to access licence accounts in the Murray Water Source such that the target water availability determined in subclause (3) is achieved, or
  - (b) the volume in the Barmah-Millewa Allowance.
- (6) If water has been withdrawn from the Barmah-Millewa Allowance in the current water

year or any previous water year, water must be credited to the Barmah-Millewa Allowance whenever the sum of available water determinations for regulated river (general security) access licences during the water year reach the target water availability specified in subclause (3), up to the volume of water taken from it under subclause (3) in that water year or any previous water year.

- (7) Releases from the Barmah-Millewa Allowance must be used to provide environmentally beneficial outcomes for the Barmah-Millewa Forest, in accordance with any relevant interstate agreements.
- (8) The Minister may approve water to be taken from the Barmah-Millewa Allowance and made available for other environmental purposes provided the volume is not required for release to provide environmentally beneficial outcomes for the Barmah-Millewa Forest under any relevant interstate agreement.
- (9) The volume of water taken from the Barmah-Millewa Allowance under subclause (8) must be the lesser of:
  - (a) the volume necessary to achieve environmental objectives for which the water is being used, and
  - (b) the volume in the Barmah-Millewa Allowance.
- (10) Water remaining in the Barmah-Millewa Allowance may be carried over from one water year to the next, provided that:
  - (a) the maximum volume that may be held in the Barmah-Millewa Allowance at any time is 350,000 ML, and
  - (b) the volume of water carried over in the Barmah-Millewa Allowance must be reduced based on the net evaporation from the extra surface area in the water storage generated by the carried over water.

**Note.** The evaporative loss must be calculated as a fraction of the NSW share of the total loss from Hume and Dartmouth reservoirs at the end of each month, applied to the carried over volume, excluding any volume taken under subclause (3) for allocation to NSW access licences. The NSW share of total loss must be calculated on a pro-rata basis based on each State's allocation, excluding any volumes taken under subclause (3).

- (11) The Minister may seek the advice of the Murray Lower Darling Environmental Water Advisory Group in making releases from the Barmah-Millewa Allowance under subclauses (7) and (8).

## **28 Barmah-Millewa Overdraw**

- (1) The Barmah-Millewa Overdraw must be credited with a volume of water up to 50,000 ML, when there are sufficient water reserves available to NSW to do so without constraining available water determinations.
- (2) Releases from the Barmah-Millewa Overdraw must be used to provide environmentally beneficial outcomes for the Barmah-Millewa Forest, in accordance with any relevant interstate agreements.
- (3) Water remaining in the Barmah-Millewa Overdraw may be carried over from one water year to the next, provided that the maximum volume that may be held in the Barmah-Millewa Overdraw at any time is 50,000 ML.
- (4) The Minister may seek the advice of the Murray Lower Darling Environmental Water Advisory Group in making releases from the Barmah-Millewa Overdraw under subclause (2).

## **29 Murray Additional Allowance**

- (1) Subject to subclause (2), the Murray Additional Allowance must be credited with a volume equivalent to 0.03 ML multiplied by the total number of unit shares specified in the share components of Murray Water Source regulated river (high security) access licences when the sum of available water determinations to regulated river (high security) access licences in the Murray Water Source for the water year has reached 0.97 ML per unit share.
- (2) The maximum credit that may be held in the Murray Additional Allowance at any time must be equal to 0.15 ML multiplied by the total number of unit shares specified in the share components of regulated river (high security) access licences.
- (3) Releases from the Murray Additional Allowance may be made for any purpose consistent with the environmental objectives in clause 9 of this Plan.
- (4) The volume debited from the Murray Additional Allowance must only be the volume of release in excess of that being made for all other purposes.
- (5) The Minister may seek the advice of the Murray Lower Darling Environmental Water Advisory Group in making releases from the Murray Additional Allowance under subclause (3).

### 30 Spills of the environmental water allowances

Whenever Hume Dam spills, the NSW share of the volume of water spilled must be debited from the environmental allowances maintained under this Division, in the amount of the spill, in the following order:

- (a) from the carried-over component of the Murray Additional Allowance,
- (b) from the carried-over component of the Barmah-Millewa Allowance,
- (c) in equal volumes from the remaining balance of the Murray Additional Allowance and the Barmah-Millewa Allowance, provided that a volume is reserved in the Barmah-Millewa Allowance equal to:
  - (i) 100,000 ML, and
  - (ii) the volume equal to that taken from the Barmah-Millewa Allowance the previous year under clause 27 (3), up to 100,000 ML.

## Division 2 Environmental water rules in the Lower Darling Water Source

### 31 Environmental water allowance for the Lower Darling Water Source

- (1) A Lower Darling Environmental Water Allowance (*the Lower Darling Allowance*) must be maintained in the Lower Darling Water Source.
- (2) The volume of water that is credited to the Lower Darling Allowance at any time must be:
  - (a) zero if the volume stored in Menindee Lakes is below 480,000 ML, or
  - (b) zero if the volume stored in Menindee Lakes has not risen above 640,000 ML since the volume stored last fell below 480,000 ML, or
  - (c) 30,000 ML minus any release from the Lower Darling Allowance during the current water year that has resulted in a loss of total water volume available to NSW under the accounting rules applying to interstate water sharing in the Murray and Lower Darling River.

**Note.** Water released from the Lower Darling Allowance may be subsequently re-regulated in the Murray River below the Darling River junction and again become available to NSW.
- (3) Releases from the Lower Darling Allowance may be made whenever a high blue

green algal alert level, as set out in the Sunraysia Regional Algal Contingency Strategy, is announced by the Minister in the Lower Darling Water Source.

- (4) The release rate must be the lesser of:
- (a) 2,000 ML per day (*ML/day*) in the months of May to October and 5,000 ML/day in the months November to April, or
  - (b) such lower rate as must be determined by the Minister to be adequate to control blue green algal levels taking into account other river flows.

### **Division 3 General system operation rules**

#### **32 Maintenance of water supply**

- (1) The water supply system must be managed so that:
- (a) it would be capable of maintaining supply on an annual basis to those exercising domestic and stock rights and native title rights through a repeat of the worst period of low inflows into these water sources, as represented in flow information held by the Department when the first water sharing plan for these water sources made under the Act came into force, and
  - (b) available water determinations of 100% of share components can be maintained for domestic and stock access licences and local water utility access licences through a repeat of the worst period of low inflows to these water sources, as represented in flow information held by the Department when the first water sharing plan for these water sources made under the Act came into force, and
  - (c) available water determinations for regulated river (high security) access licences of 0.97 megalitres per unit of share component (*ML/unit of share component*) can be maintained through a repeat of the worst period of low inflows to these water sources, as represented in flow information held by the Department when the first water sharing plan for these water sources made under the Act came into force.
- (2) To achieve subclause (1), sufficient volumes of water must be set aside from the NSW share of minimum predicted inflows into the Murray Water Source and in reserves held by NSW in water storages in each water source.

**Note.** *Reserves* is defined in the Dictionary.

### 33 Water delivery and channel capacity constraints

- (1) Where necessary for determining numerical extraction components, managing water releases or providing water under access licences, the maximum water delivery or operating channel capacity in these water sources will be determined by the Minister from time to time, taking into account:
  - (a) inundation of private land or interference with access, and
  - (b) the effects of inundation on the floodplain and associated wetlands, and
  - (c) the transmission losses expected to occur, and  
**Note. *Transmission losses*** is defined in the Dictionary.
  - (d) capacities of water management structures controlled by the Minister.
- (2) The water supply system must be managed taking into account any channel capacity constraints specified by the Minister under subclause (1).

**Notes.**

- 1 The channel capacities listed in Note 2 are physical constraints necessary to mitigate the risk of flooding. The rules in this clause relate to the delivery of water through the area of operation of this Plan.
- 2 The following capacities have been assessed:
  - (a) Hume Dam and Lake Mulwala, 25,000 ML/day,
  - (b) Tocumwal Choke, 10,600 ML/day,
  - (c) Barmah Choke, 8,500 ML/day,
  - (d) Edward River offtake, 1,600 ML/day,
  - (e) Gulpa Creek, 350 ML/day,
  - (f) Pooncarie, 20,000 ML/day.

### 34 Flood operation rules

The operation of all storages during times of flood is to be undertaken in accordance with the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth.

### 35 Airspace

Airspace operation of all storages must be in accordance with the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth.

**Notes.**

- 1 ***Airspace*** is defined in the Dictionary.

- 2 The rate of pre-releases from Hume Dam could be increased to 38,500 ML/day subject to the required easements being established. Increasing pre-release rates could benefit wetlands between Hume Dam and Lake Mulwala.

### 36 Priority of extractions for access licences

- (1) This clause does not apply to supplementary water access licences.
- (2) Where the extraction component of an access licence in the Murray Water Source does not specify a rate of extraction as a share of supply capability or a volume per unit of time, the following priority of extraction will apply whenever supply capability is insufficient to satisfy all water requirements in any section of these water sources:
- (a) water will be supplied to domestic and stock access licences and local water utility access licences that have placed orders for water, and
  - (b) then any remaining supply capability must be shared between regulated river (high security) access licences, regulated river (conveyance) access licences and regulated river (general security) access licences that have placed an order for water, in accordance with a method approved by the Minister.
- (3) Where the extraction component of an access licence in the Lower Darling Water Source does not specify a rate of extraction as a share of supply capability or a volume per unit of time, the following priority of extraction will apply whenever supply capability is insufficient to satisfy all water requirements in any section of these water sources:
- (a) water will be supplied to domestic and stock access licences and local water utility access licences that have placed orders for water, and
  - (b) then any remaining supply capability must be shared between regulated river (high security) access licences and regulated river (general security) access licences that have placed an order for water, in accordance with a method approved by the Minister.

#### Notes.

- 1 **Supply capability** is defined in the Dictionary.
- 2 During periods of channel capacity constraint, the implementation of the above provisions may result in ordering delays and an inability to supply water requirements from regulated water deliveries on a daily basis.
- (3) Advice from water user representatives should be sought prior to the method in subclause (2) (b) being approved.

**Note.** The Department will use meetings with the customer service committee as a means to consult with water user representatives.

### **37 Numerical specification of extraction entitlements**

- (1) The extraction components of any access licences in these water sources that are affected by a physical supply constraint may be amended under section 68A of the Act to specify a volume per unit of time or share of supply capability in order to share the impacts of any physical supply constraint among those access licences.
- (2) The rate of shares specified in the amended extraction components under subclause (1) for:
  - (a) domestic and stock access licences, local water utility access licences and regulated river (high security) access licences should, where possible, be the amount which, in the Minister's opinion, is sufficient to satisfy the maximum daily water requirements of the access licences in that order, and
  - (b) after satisfying subclause (2) (a), the remaining supply capability should be distributed among regulated river (conveyance) access licences and regulated river (general security) access licences in proportion to the share component of each access licence and the available water determination relationship in clause 47 (2).
- (3) When action under subclause (1) is undertaken, the Minister may also amend the extraction components of access licences in other sections of these water sources that are not affected by the physical supply constraint to exclude extraction components in sections of the water source affected by the action under subclause (1).

## Part 7 Limits to the availability of water

**Note.** Part 12 allows for amendments to be made to this Part.

### Division 1 Long-term average annual extraction limit

#### 38 General

The availability of water for extraction in these water sources on a long-term basis is to be managed in accordance with this Part.

#### 39 Volume of the long-term average annual extraction limit

(1) Subject to any variation under subclauses (2) and (3), this Plan establishes a long-term average annual extraction limit for each of these water sources which:

(a) for the Murray Water Source is the lesser of:

(i) the long-term average annual extraction from the Murray Water Source that would occur with:

(A) the water storages and water use development that existed in 2000/2001, and

**Note.** *Water use development* is defined in the Dictionary.

(B) the share components of water access licences existing at the commencement of the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003*, and

(C) the rules defined in the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003*, minus 17,800 ML/year, or

(ii) the long-term average annual extraction from the Murray Water Source that would occur under Cap baseline conditions as agreed under the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth, minus 17,800 ML/year, and

**Note.** The 17,800 ML subtracted in subclause (1) (a) (i) and (ii) is the estimated long-term extraction associated with the 100 gigalitres of supplementary water access licence share component purchased under the Living Murray Program and retired from the bulk

access regime. However, the purchased supplementary water access licence share component will continue to attract water allocations in accordance with the available water determinations made to all supplementary water access licences. The taking of water allocations under this licence will not be accounted for against the long-term extraction limit.

- (b) for the Lower Darling Water Source is the lesser of:
- (i) the long-term average annual extraction from the Lower Darling Water Source that would occur with:
- (A) the water storages and water use development that existed in 2000/2001, and
- (B) the share components of water access licences existing at the commencement of the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003* plus 47,800 ML issued as part of the arrangements that replaced the replenishment flow provisions in clause 60 (now repealed) of that Plan, and
- (C) the rules defined in *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003*, minus 35,500 ML/year, or
- (ii) the long-term average annual extraction from the Lower Darling Water Source that would occur under the development and management conditions used to define Cap in Schedule E of the Murray-Darling Basin Agreement of the *Water Act 2007* of the Commonwealth, minus 35,500 ML/year.

**Note.** The 35,500 ML/year subtracted in subclause (1) (b) (i) and (ii) is the estimated long-term extraction associated with the 250,000 ML shares of supplementary water access licence share component purchased under the Living Murray Program and retired from the bulk access regime. However, the purchased supplementary water access licence share component will continue to attract water allocations in accordance with the available water determinations made to all supplementary water access licences. The taking of water allocations under this licence will not be accounted for against the long-term extraction limit.

- (2) The values referred to in subclauses (1) (a) and (1) (b) will be adjusted for any access licence dealing under section 71R or 71U of the Act.
- (3) If an access licence is cancelled as part of an arrangement to provide additional water to the Snowy River under the Snowy Water Inquiry Outcomes Implementation Deed

the values referred to in subclauses (1) (a) and (1) (b) will be reduced by a volume which appropriately reflects the licence share of water made available in these water sources.

#### **40 Calculation of the long-term average annual extraction limit and current average annual extractions**

- (1) For the purposes of calculating the long-term average annual extraction limit for each of these water sources, the following must be included:
  - (a) all water extractions under all categories of water access licences, except where subclause (2) (b) applies,
  - (b) all water extractions under domestic and stock rights and native title rights,
  - (c) all extractions from the floodplain, except those under a water access licence that specifies another water source that are used in conjunction with extractions under a water access licence in these water sources,
  - (d) water allocations assigned from water allocation accounts of access licences in these water sources to access licence water allocation accounts in another water source.
- (2) For the purposes of calculating the long-term average annual extraction limit and current annual average extractions for each of these water sources, the following must not be included:
  - (a) the use of water pursuant to the environmental water rules and environmental water allowance rules in Divisions 1 and 2 of Part 6 of this Plan,
  - (b) water allocations assigned from water allocation accounts of access licences in any other water source to water allocation accounts of access licences in these water sources.

**Note.** Under section 8F of the Act the long-term average annual extraction limit is taken to be varied by the amount of any change to the amount of water committed as licensed environmental water, excluding water committed under section 8C of the Act. The variation in the long-term average annual extraction limit is to be determined in accordance with a methodology approved by the Minister and published in the Gazette.

#### **41 Assessment of average annual extractions against long-term average annual extraction limit**

- (1) An assessment of current average annual extractions against the long-term average
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annual extraction limit is to be conducted as set out in this clause.

- (2) The assessment referred to in subclause (1) is to be undertaken after the end of each water year, using the hydrologic computer model that, at the time, is approved by the Department for assessing long-term water extractions from these water sources.
- (3) To assess the long-term average annual extraction limit, the model referred to in subclause (2) must be set to represent as closely as possible the conditions referred to in clauses 39 (1) (a) and (b).
- (4) To assess current long-term average annual extraction from these water sources the model referred to in subclause (2) will be set to represent as closely as possible all water use development, supply system management and other factors affecting the quantity of long-term average annual extraction from these water sources at the time of the assessment.

#### **42 Compliance with the long-term average annual extraction limit**

- (1) The long-term average annual extraction from each of these water sources may not be permitted to exceed the long-term average annual extraction limit for the respective water source specified in clause 39.
- (2) Pursuant to subclause (1), if it has been assessed that the current long-term average annual extraction from the Murray Water Source exceeds:
  - (a) the volume specified in clause 39 (1) (a) (i) by 3% or more, or
  - (b) the volume specified in clause 39 (1) (a) (i) by more than half the difference between the volume specified in clause 39 (1) (a) (i) and the volume specified in clause 39 (1) (a) (ii), or
  - (c) the volume specified in clause 39 (1) (a) (ii),then the maximum available water determination made for supplementary water access licences in the Murray Water Source under clause 49 must be reduced for the following water year in accordance with subclause (6).
- (3) Once the maximum available water determination for supplementary water access licences in the Murray Water Source has reduced to zero under subclause (2), then the maximum available water determination for regulated river (general security) access licences in the Murray Water Source under clause 48 will be reduced.

- (4) Pursuant to subclause (1), if it has been assessed that the current long-term average annual extraction from the Lower Darling Water Source exceeds:
- (a) the volume specified in clause 39 (1) (b) (i) by 3% or more, or
  - (b) the volume specified in clause 39 (1) (b) (i) by more than half the difference between the volume specified in clause 39 (1) (b) (i) and the volume specified in clause 39 (1) (b) (ii), or
  - (c) the volume specified in clause 39 (1) (b) (ii),
- then the maximum available water determination made for supplementary water access licences in the Lower Darling Water Source, under clause 49 must be reduced for the following water year in accordance with subclause (6).
- (5) Once the maximum available water determination for supplementary water access licences in the Lower Darling Water Source has reduced to zero under subclause (4), then the maximum available water determination for regulated river (general security) access licences in the Lower Darling Water Source under clause 48 will be reduced.
- (6) The reduction under subclauses (2) – (5) is to be of an amount that is, in the Minister’s opinion, necessary to return long-term average annual extractions in the relevant water source to the long-term average annual extraction limit.
- (7) If action has been taken under subclauses (2) – (5) in either of these water sources, and a subsequent assessment under clause 41 indicates that current long-term average annual extractions from these water sources are below the long-term extraction limit for the respective water source by more than 3%, or by more than half the difference between the volume specified in clause 39 (1) (a) (i) and the volume specified in clause 39 (1) (a) (ii) in the Murray Water Source, or by more than half the difference between the volume specified in clause 39 (1) (b) (i) and the volume specified in clause 39 (1) (b) (ii) in the Lower Darling Water Source, then previous reductions under subclauses (2) – (5) may be reversed to the degree that it is, in the Minister’s opinion, necessary to return the long-term average annual extractions to the long-term average annual extraction limit for that water source.
- (8) Any reversal of previous reductions under subclause (7):
- (a) must not exceed previous reductions made under subclauses (2) – (5), and

- (b) must first reverse previous reductions relating to regulated river (general security) access licences.
- (9) The assessment of the degree of reduction required under subclauses (2) – (5) or degree of any reversal under subclause (7) must be made using the same computer model used to carry out assessments under clause 41.
- (10) Before taking action under subclauses (2) – (5) or (7), the Minister should consult with water user representatives on:
  - (a) the data used in the computer model referred to in clause 41, and
  - (b) the proposed actions to be taken in accordance with subclause (2) – (5) or (7).

**Note.** The Department will use meetings with the customer service committee as a means to consult with water user representatives.

## **Division 2 Available water determinations**

### **43 General**

Available water determinations for access licences with share components that specify these water sources are to be expressed as either:

- (a) a percentage of the share component for access licences where share components are specified as ML/year, or
- (b) megalitres per unit share for access licences where share components are specified as a number of unit shares.

### **44 Available water determinations for domestic and stock access licences**

- (1) In making available water determinations for domestic and stock access licences, the Minister should consider the rules in this clause.
  - (2) At the commencement of each water year in which this Plan has effect, an available water determination of 100% of the access licence share component should be made for domestic and stock access licences if water is available.
  - (3) If the available water determination made at the commencement of the water year under subclause (2) is less than 100% then further available water determinations may be made for domestic and stock access licences when water becomes available.
  - (4) The sum of available water determinations made for domestic and stock access
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licences in any water year must not exceed 100% of the share components.

**45 Available water determinations for local water utility access licences**

- (1) In making available water determinations for local water utility access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of each water year in which this Plan has effect, an available water determination of 100% of the access licence share component should be made for local water utility access licences if water is available.
- (3) If the available water determination made at the commencement of the water year under subclause (2) is less than 100% then further available water determinations may be made for local water utility access licences when water becomes available.
- (4) The sum of available water determinations made for local water utility access licences must not, in any water year, exceed 100% of the share components.

**46 Available water determinations for regulated river (high security) access licences**

- (1) In making available water determinations for regulated river (high security) access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of each water year, an available water determination of 100% of the access licence share component should be made, if water is available, for the following subcategories of regulated river (high security) access licences in the Murray Water Source:
  - (a) Aboriginal cultural,
  - (b) Community and education,
  - (c) Environmental,
  - (d) Research,
  - (e) Town water supply.
- (3) At the commencement of each water year, an available water determination of:
  - (a) 0.97 ML/unit of share component should be made for regulated river (high security) access licences in the Murray Water Source of subcategories other than those listed in subclause (2), whenever the sum of available water

determinations for regulated river (general security) access licences in the Murray Water Source for the water year is less than 0.97 ML/unit of share component, or

- (b) 1 ML/unit of share component should be made for regulated river (high security) access licences in the Murray Water Source of subcategories other than those listed in subclause (2), whenever the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source for the water year is 0.97 ML/unit of share component or greater.
- (4) At the commencement of each water year, an available water determination of 1 ML/unit of share component should be made for regulated river (high security) access licences in the Lower Darling Water Source.
- (5) If the available water determination made at the commencement of the water year under subclauses (3) and (4) are less than 1 ML/unit of share component, then further assessments of available water must be carried out at least monthly and available water determinations made if water allocations can be provided.
- (6) The available water determinations in the Murray Water Source made under subclauses (2), (3) and (5) should not be made until water becomes available after making provision for the following in the Murray Water Source:
  - (a) sufficient water has been set aside to meet the environmental water rules and environmental water allowance rules established in clause 16 (1) (a) (i) and (ii),
  - (b) sufficient water has been set aside to meet the requirements for domestic and stock rights,
  - (c) sufficient water has been set aside to meet the requirements for native title rights,
  - (d) the sum of available water determinations in that water year for domestic and stock access licences is 100% of the access licence share component,
  - (e) the sum of available water determinations in that water year for local water utility access licences is 100% of the access licence share component,
  - (f) the sum of available water determinations in that water year for subcategories

- listed in subclause (2) is 100% of the access licence share component,
- (g) sufficient water has been set aside to meet the water allocations already in the regulated river (general security) access licence water allocation accounts,
  - (h) sufficient water has been set aside to meet water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) to (g),
  - (i) sufficient water has been set aside to meet water losses associated with the holding and delivery of water resulting from the available water determination for regulated river (high security) access licences.
- (7) The available water determinations in the Lower Darling Water Source made under subclauses (4) and (5) should not be made until water becomes available after making provision for the following in the Lower Darling Water Source:
- (a) sufficient water has been set aside to meet the environmental water rules and environmental water allowance rules established in clause 16 (1) (a) (i) and (ii),
  - (b) sufficient water has been set aside to meet the requirements for domestic and stock rights,
  - (c) sufficient water has been set aside to meet the requirements for native title rights,
  - (d) the sum of available water determinations in that water year for domestic and stock access licences is 100% of the access licence share component,
  - (e) the sum of available water determinations in that water year for local water utility access licences is 100% of the access licence share component,
  - (f) sufficient water has been set aside to meet the water allocations already in the regulated river (general security) access licence water allocation accounts,
  - (g) sufficient water has been set aside to meet water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) to (f),
  - (h) sufficient water has been set aside to meet water losses associated with the holding and delivery of water resulting from the available water determination for regulated river (high security) access licences.
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- (8) The sum of available water determinations made for regulated river (high security) access licences must not, in any water year, exceed 1 ML/unit of share component in these water sources.

**47 Available water determinations for regulated river (conveyance) access licences**

- (1) In making available water determinations for regulated river (conveyance) access licences, the Minister should consider the rules in this clause.
- (2) If sufficient water can be provided, available water determinations for regulated river (conveyance) access licences in the Murray Water Source should be made so that the sum of available water determinations for regulated river (conveyance) access during the water year is:
- (a) 0.5 ML/unit of share component, when the sum of available water determinations for regulated river (high security) access licences in the Murray Water Source for the water year is 0.97 ML/unit of share component and the sum of available water determinations for regulated river (general security) access licences for the water year is 0 ML/unit of share component, or
  - (b) 0.5 ML/unit of share component plus 0.003883 ML/unit of share component for each 0.01 ML/unit of share component by which the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source for the water year exceeds 0 ML/unit of share component, when the sum of available water determinations for regulated river (general security) access licences for the water year is greater than 0 ML/unit of share component but less than 0.6 ML/unit of share component, or
  - (c) 0.733 ML/unit of share component plus 0.006675 ML/unit of share component for each 0.01 ML/unit of share component by which the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source for the water year exceeds 0.6 ML/unit of share component, when the sum of available water determinations for regulated river (general security) access licences for the water year is equal to or greater than 0.6 ML/unit of share component but less than 1 ML/unit of share component, or
  - (d) 1 ML/unit of share component, when the sum of available water determinations

for regulated river (general security) access licences for the water year is equivalent to or greater than 1 ML/unit of share component.

- (3) The available water determinations made under subclause (2) should not be made until provision has been made in the Murray Water Source for the following:
- (a) sufficient water has been set aside to meet the planned environmental water rules established in clause 16 (1) (a) (i) and (ii),
  - (b) sufficient water has been set aside to meet the requirements for domestic and stock rights,
  - (c) sufficient water has been set aside to meet the requirements for native title rights,
  - (d) the sum of available water determinations in that water year for domestic and stock access licences is 100% of the access licence share component,
  - (e) the sum of available water determinations in that water year for local water utility access licences is 100% of the access licence share component,
  - (f) the sum of available water determinations in that water year for subcategories of regulated river (high security) access licences listed in clause 46 (2) is 100% of the access licence share component,
  - (g) the sum of available water determinations in that water year for regulated river (high security) access licences, other than those listed in clause 46 (2), in the Murray Water Source is 0.97 ML/unit of share component,
  - (h) sufficient water has been set aside to meet the water allocations already in the regulated river (general security) access licence water allocation accounts,
  - (i) sufficient water has been set aside to meet water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) – (h),
  - (j) sufficient water has been set aside to meet water losses associated with the holding and delivery of water resulting from the available water determination for regulated river (conveyance) access licences.
- (4) If the sum of available water determinations for regulated river (conveyance) access licences in the Murray Water Source resulting from subclause (2) is less than 1
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ML/unit of share component, then further assessments of available water must be carried out at least monthly and available water determinations made if water allocation can be provided.

**48 Available water determinations for regulated river (general security) access licences**

- (1) In making available water determinations for regulated river (general security) access licences, the Minister should consider the rules in this clause.
- (2) Available water determinations may be made for regulated river (general security) access licences in the Murray Water Source when water becomes available after making provision for the following in the Murray Water Source:
  - (a) sufficient water has been set aside to meet the planned environmental water rules established in clause 16 (1) (a) (i) and (ii) ,
  - (b) sufficient water has been set aside to meet the requirements for domestic and stock rights,
  - (c) sufficient water has been set aside to meet the requirements for native title rights,
  - (d) the sum of available water determinations in that water year for domestic and stock access licences is 100% of the access licence share component,
  - (e) the sum of available water determinations in that water year for local water utility access licences is 100% of the access licence share component,
  - (f) the sum of available water determinations in that water year for subcategories of regulated river (high security) access licences listed in clause 46 (2) is 100% of the access licence share component,
  - (g) the sum of available water determinations in that water year for regulated river (high security) access licences in the Murray River Water Source is 0.97 ML/unit of share component of the access licence share component,
  - (h) the sum of available water determinations in that water year for regulated river (conveyance) access licences in the Murray River Water Source is 0.5 ML/unit of share component of the access licence share component,
  - (i) sufficient water has been set aside to meet the water allocations already in

- regulated river (general security) access licence water allocation accounts,
- (j) sufficient water has been set aside to meet water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) – (i),
  - (k) sufficient water has been set aside to meet water losses associated with the holding and delivery of water resulting from the available water determination for regulated river (general security) access licences.
- (3) Available water determinations may be made for regulated river (general security) access licences in the Lower Darling Water Source when water becomes available after making provision for the following in the Lower Darling Water Source:
- (a) sufficient water has been set aside to meet the planned environmental water rules established in clause 16 (1) (a) (i) and (ii),
  - (b) sufficient water has been set aside to meet the requirements for domestic and stock rights,
  - (c) sufficient water has been set aside to meet the requirements for native title rights,
  - (d) the sum of available water determinations in that water year for domestic and stock access licences is 100% of the access licence share component,
  - (e) the sum of available water determinations in that water year for local water utility access licences is 100% of the access licence share component,
  - (f) the sum of available water determinations in that water year for regulated river (high security) access licences in the Lower Darling Water Source is 1 ML/unit of share component of the access licence share component,
  - (g) sufficient water has been set aside to meet the water allocations already in regulated river (general security) access licence water allocation accounts,
  - (h) sufficient water has been set aside to meet water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) – (g),
  - (i) sufficient water has been set aside to meet water losses associated with the holding and delivery of water resulting from the available water determination
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for regulated river (general security) access licences.

- (4) Before taking into consideration water storages in the Lower Darling Water Source for assessments of available water in the Murray Water Source, the sum of water allocations made for regulated river (general security) access licences in the Lower Darling Water Source must be that specified in subclause (6).
- (5) The sum of available water determinations made for regulated river (general security) access licences in the Murray Water Source in any water year must not exceed 1.1 ML/unit of share component or such lower amount as results from the operation of clause 42.
- (6) The sum of available water determinations to regulated river (general security) access licences in the Lower Darling Regulated River Water Source in any water year must not exceed 1 ML/unit share or such lower amount as results from the operation of clause 42.
- (7) If the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source resulting from subclause (2) is less than 1.1 ML/unit of share component, then further assessments of available water must be carried out at least monthly and available water determinations made if water allocations can be provided.
- (8) If the sum of available water determination for regulated river (general security) access licences in the Lower Darling Regulated River Water Source resulting from subclause (2) is less than 1 ML/unit of share component, then further assessments of available water must be carried out at least monthly and available water determinations made if water allocations can be provided.
- (9) Whenever the sum of available water determinations for regulated river (general security) access licences during the water year reach the target water availability determined in clause 27 (3), no further available water determinations are to be made for Murray Water Source regulated river (general security) access licences during the water year until the Barmah-Millewa Allowance has been credited with a volume equivalent to any water taken from it under subclause 27 (3) in the current water year, or any previous water year, that has not already been re-credited to the Barmah-Millewa Allowance.

**49 Available water determinations for supplementary water access licences**

- (1) In making available water determinations for supplementary water access licences, the Minister should consider the rules in this clause.
- (2) Available water determinations may be made for supplementary water access licences at the commencement of the water year.
- (3) The available water determination for supplementary water access licences in these water sources made under subclause (2) must not exceed 1 ML/unit of share component, or such lower amount as results from the operation of clause 42.

## Part 8 Rules for granting access licences

### Notes.

- 1 This Part is made in accordance with sections 20, 61 and 63 of the Act.
- 2 Access licences granted in these water sources will be subject to mandatory conditions and may be subject to discretionary conditions.

### 50 Specific purpose access licences

**Note.** Section 61 of the Act allows for the granting of specific purpose access licences under the regulations and the relevant water sharing plan. Only those specific purpose access licences listed in clause 10 of the *Water Management (General) Regulation 2011* can be granted under the regulations. The licences that may be applied for under subclause (1) are in addition to applications for the categories and subcategories of specific purpose access licences that may be made in accordance with clause 10 of the *Water Management (General) Regulation 2011*. The restrictions in subclauses (2) and (3) apply to the granting of specific purpose access licences.

- (1) A specific purpose access licence must not be granted in these water sources unless the Minister is satisfied that the share and extraction component of the access licence is the minimum required to meet the circumstances in which the access licence is proposed to be used.
- (2) Applications may be made for the following access licences in these water sources:
  - (a) a regulated river (high security–research) access licence for water supply for research purposes, provided that such research is undertaken by an organisation approved by the Minister as an accredited research body, and
  - (b) an access licence which will receive water allocations that reflect the volume of water saved as a result of works or other actions taken under the Snowy Water Inquiry Outcomes Implementation.
- (3) Applications may not be made for an access licence of the subcategory “Aboriginal cultural” if the share component of the proposed access licence is more than 10 ML/year.
- (4) An access licence of the subcategory “Aboriginal cultural” may only be granted for the taking of water by an Aboriginal person or Aboriginal community for any personal, domestic or communal purpose, including drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, gathering and for recreational, cultural and ceremonial purposes.

**Note.** *Aboriginal person* is defined in the Dictionary.

## Part 9 Rules for managing access licences

### Division 1 Water allocation account management rules

**Note.** The Act provides for the keeping of water allocation accounts for access licences. The rules in this Part impose further restrictions on the volume of water that may be taken under an access licence over a specified period of time. These restrictions are in addition to any other limits on access licences for the taking of water. It is an offence under the Act to take water under an access licence for which there is no or insufficient water allocation.

#### 51 Crediting rules for water allocation accounts

- (1) The maximum volume of water allocation that may be credited to a regulated river (general security) access licence in the Murray Water Source from available water determinations during a water year is equal to 1.1 ML multiplied by the number of unit shares specified in the access licence share component minus the volume of water allocations carried over from the previous water year.

**Note.** Subclause (1) means that if a volume equivalent to say 0.3 ML/unit of share component is carried over in a licence account and the allocations for the water year totalled say 0.9 ML/unit of share component, then the licence account would only be credited with a further 0.8 ML/unit of share component. The balance of 0.1 ML/unit of share component would not be credited to that licence account.

- (2) The maximum volume of water allocation that may be credited to a regulated river (general security) access licence in the Lower Darling Water Source from available water determinations during a water year is equal to the greater of:
  - (a) 0.5 ML multiplied by the number of unit shares specified in the access licence share component, or
  - (b) 1 ML multiplied by the number of unit shares specified in the access licence share component minus the volume of water allocations carried over from the previous water year.

**Note.** Subclause (2) ensures that those regulated river (general security) access licence holders with on-farm storages who have carried over additional water as a result of the operation of clause 53 (3) can receive up to 50% of the current year's water allocations.

#### 52 Debiting rules for water allocation accounts

- (1) Subject to subclause (2), the water allocation taken under local water utility access licences, domestic and stock access licences, regulated river (high security) access licences, regulated river (conveyance) access licences and supplementary access licences must be assessed and debited as the volume of water extracted by the

approved water supply works nominated by the access licence.

(2) Upon written notice from the Minister to the licence holder, the water allocation taken under local water utility access licences, domestic and stock access licences, regulated river (high security) access licences, regulated river (conveyance) access licences and supplementary access licences must be assessed and debited as the greater of:

- (a) the volume of water extracted by the approved water supply works nominated by the access licence, or
- (b) the volume of water ordered for extraction by the approved water supply works nominated by the access licence,

for the term specified by the Minister.

(3) Subject to subclause (4), the water allocation taken under a regulated river (general security) access licence must be assessed and debited as the volume of water extracted by the approved water supply works nominated by the access licence, except where the provisions of clause 55 apply.

(4) Upon written notice from the Minister to the licence holder, the water allocation taken under regulated river (general security) access licences must be assessed and debited as the greater of:

- (a) the volume of water extracted by the approved water supply works nominated by the access licence, except where the provisions of clause 55 apply, or
- (b) the volume of water ordered for extraction by the approved water supply works nominated by the access licence,

for the term specified by the Minister.

(5) The Minister should only take action under subclauses (2) and (4) in accordance with the procedures specified in a water order debiting protocol approved by the Minister.

**Note.** It is intended that the Minister may take action under subclauses (2) and (4) where water orders have been exceeding the volume of water being taken under an access licence and this cannot be explained by rainfall or other unavoidable factors.

(6) Water allocation losses attributed to evaporation and dam spills associated with water allocations carried over from the previous water year in the water allocation accounts of each regulated (general security) access licence with a share component that specifies the Lower Darling Water Source must be calculated as specified in

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subclauses (7) and (8) and withdrawn from each access licence water allocation account.

- (7) The water allocation loss attributed to evaporation for each regulated (general security) access licence with a share component that specifies the Lower Darling Water Source must be the lesser of:
- (a) the volume of water in the access licence account at the commencement of the assessment period in excess of:
    - (i) the number of unit shares multiplied by the available water determination for that water year,
    - (ii) plus the water allocations assigned from any other access licence during the current water year,
    - (iii) minus the water allocations assigned to any other access licence during the current water year, or
  - (b) the volume calculated under paragraph (a) divided by the total volume for all regulated (general security) access licences as calculated under paragraph (a) in the Lower Darling Water Source, multiplied by the depth of evaporation from the Menindee Lakes over the period of assessment multiplied by the additional surface area of water in the Menindee Lakes resulting from total excess volume calculated under paragraph (a) for all regulated (general security) access licences with a share component that specifies the Lower Darling Water Source.
- (8) The water allocation loss attributed to dam spills for each regulated (general security) access licence with a share component that specifies the Lower Darling Water Source must be the lesser of:
- (a) the volume of water for the access licence calculated under subclause (7) (a), and
  - (b) the volume of water for the access licence calculated under subclause (7) (a), divided by the total volume for all regulated (general security) access licences as calculated under paragraph (a) in the Lower Darling Water Source, multiplied by the total volume of water spilled from Menindee Lakes during the assessment period.

### **53 Carryover rules for water allocation accounts**

- (1) Water allocations remaining in the water allocation accounts for domestic and stock access licences, local water utility access licences, regulated river (high security) access licences and supplementary water access licences cannot be carried over from one water year to the next.
- (2) The maximum water allocation that can be carried over from one water year to the next in the water allocation account of a regulated river (general security) access licence with a share component that specifies the Murray Water Source is equal to 0.5 ML multiplied by the number of unit shares per share component.
- (3) The maximum water allocation that can be carried over from one water year to the next in the water allocation account of a regulated river (general security) access licence with a share component that specifies the Lower Darling Water Source is equal to 0.5 megalitres multiplied by the number of unit shares per share component, plus the storage volume of on-farm storages supplied by works nominated on the access licence less the volume of water contained in the on-farm storages at the end of the water year.

## **Division 2 Daily access rules**

### **54 Taking of water under supplementary water access licences**

- (1) The taking of water under supplementary water access licence must only be permitted in accordance with announcements made by the Minister, in accordance with the rules in the Plan.
- (2) The maximum volume that may be taken under supplementary water access licences during each period of time to which an announcement applies may be expressed as a number of megalitres per unit share
- (3) Taking of water under supplementary water access licences should be managed, as far as possible, to evenly share access opportunity amongst all supplementary water access licences in accordance with a method approved by the Minister.
- (4) Advice from water user representatives should be sought prior to the method in subclause (3) being approved.

**Note.** The Department will use meetings with the Customer Service Committee as a means to

consult with water user representatives.

- (5) Taking of water under supplementary water access licences in these water sources should only be permitted once flows are in excess of those required:
  - (a) to meet the planned environmental water rules established in clause 16 (1) (a) (i) and (ii), and, and
  - (b) to supply domestic and stock and native title rights requirements in the water source, and
  - (c) to supply higher priority access licence requirements in the water source.
- (6) Taking of water under supplementary water access licences in the Murray Water Source should also only be permitted:
  - (a) from flows that cannot be stored in Lake Victoria water storage, and
  - (b) from flows that, in the Minister's opinion, will not contribute to supply requirements to South Australia in accordance with the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth, and
  - (c) from flows that, in the Minister's opinion, will not contribute to reducing the surface water salinity measurement in the Murray River at Morgan when it is in excess of 800 electrical conductivity units, and
  - (d) if, in the Minister's opinion, the water that will be taken would not assist in the reduction of existing medium or high blue-green algae alerts, and
  - (e) if, in the Minister's opinion, the taking of water will not prevent the commencement of a waterbird breeding event or will not threaten the success of an existing waterbird breeding event, and
  - (f) between 1 April and 30 October each year, if, in the Minister's opinion, the taking of water will not prevent significant flow variations in those sections of the water source where flow heights are unaffected by weirs, or reduce beneficial flooding of the Barmah-Millewa forests or other Murray Water Source riverine ecosystems.
- (7) Taking of water under supplementary water access licences in the Lower Darling Water Source should also only be permitted:
  - (a) if the Menindee Lakes water storages are full or flows upstream of the water

source are sufficient to fill them, and

- (b) if the water that will be taken cannot be stored in Lake Victoria, and
- (c) from flows that, in the Minister's opinion, will not contribute to supply requirements to South Australia in accordance with the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth, and
- (d) if, in the Minister's opinion, the water that will be taken cannot be used to supply regulated river (general security) allocations in the Murray Water Source, and
- (e) from flows that, in the Minister's opinion, will not contribute to reducing the surface water salinity measurement in the Murray River at Morgan when it is in excess of 800 electrical conductivity units, and
- (f) if, in the Minister's opinion, the water that will be taken will not contribute to the reduction of existing medium or high blue-green algae alerts, and
- (g) if the taking of water will not prevent flows in the Darling River from reaching 7,000 ML/day at Weir 32 for a period of time which, in the Minister's opinion, is sufficient to permit adequate passage of fish over Weir 32, and
- (h) if, in the Minister's opinion, the taking of water will not prevent the commencement of a waterbird breeding event or will not threaten the success of an existing event, and
- (i) between 1 April and 30 October each year, if, in the Minister's opinion, the taking of water will not prevent significant flow variations occurring in those sections of the water source where flow heights are unaffected by weirs.

#### **55 Taking of uncontrolled flows under regulated river (general security) access licences**

- (1) Whenever the sum of available water determinations for regulated river (general security) access licences in either of these water sources in a water year is less than or equal to 0.6 ML/unit of share component, water may be taken without debit to regulated river (general security) access licence water allocation accounts whenever the taking of water under supplementary water access licences is permitted.
  - (2) The total volume of water that must be assessed as taken without debit to the access
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licence water allocation account under subclause (1) during the water year is limited to 1 ML multiplied by the number of unit shares minus the sum of the volume of water allocation that was carried over in the access licence water allocation account from the previous water year and the volume of water allocations resulting from available water determinations during the current year.

## **Part 10 Access licence dealing rules**

### **56 General**

The access licence dealing rules established in this Part apply to all access licence dealings in these water sources.

#### **Notes.**

- 1 Access licence dealings in these water sources are subject to the provisions of the Act, the regulations, the access licence dealing principles and the access licence dealing rules established under this Part.
- 2 The access licence dealing principles prevail over the access licence dealing rules in this Plan to the extent of any inconsistency, as provided under section 71Z (3) of the Act.

### **57 Conversion of access licence to new category**

Dealings under section 71O of the Act are prohibited in these water sources.

### **58 Assignment of rights dealings**

- (1) Dealings under section 71Q of the Act within the same water source are prohibited in these water sources if the dealing involves:
  - (a) an assignment of rights from an access licence that does not nominate a water supply work located downstream of the Barmah Choke in the Murray Water Source to an access licence that nominates a water supply work downstream of the Barmah Choke in the Murray Water Source, or
  - (b) regulated river (conveyance) access licence WAL9422, or
  - (c) regulated river (high security) access licence WAL9423.
- (2) An access licence in the Murray Water Source may only be varied following the variation of an access licence in another water source if the Minister is satisfied that the variation of the licence will not result in the requirement to supply more water allocation from water storages upstream of the Barmah Choke to water access licences downstream of the Barmah Choke.

### **59 Subdivision and consolidation of access licences**

Dealings under section 71P of the Act are prohibited in these water sources if the dealing involves:

- (a) regulated river (conveyance) access licence WAL9422, or
- (b) regulated river (high security) access licence WAL9423.

**60 Amendment of share components dealings (change of water source)**

- (1) Dealings under section 71R of the Act are prohibited in these water sources if the dealing involves the granting of an access licence in one of these water sources or another water source, unless:
  - (a) the access licence dealing rules in the water source in which the access licence is granted permit such a dealing, and
  - (b) a conversion factor, established by the Minister and published in an order made under section 71Z of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in the water source in which the access licence is being cancelled, has been applied, and
  - (c) the water source in which the access licence is granted is one of the following:
    - (i) a water source within the Unregulated Upper Murray Extraction Management Unit and the Unregulated Middle Murray Extraction Management Unit,
    - (ii) the Murrumbidgee Regulated River Water Source,
    - (iii) the other of these water sources.
- (2) Dealings under section 71R of the Act are prohibited in these water sources if the dealing involves the cancellation of an access licence in one of these water sources or another water source, unless:
  - (a) the access licence dealing rules in the water source in which the access licence is cancelled permit such a dealing, and
  - (b) a conversion factor, established by the Minister and published in an Order made under section 71Z of the Act that protects environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in the water source in which the access licence is being issued, has been applied, and

- (c) the water source in which the access licence is cancelled is one of the following:
  - (i) the Murrumbidgee Regulated River Water Source, or
  - (ii) the other of these water sources.
- (3) Dealings under section 71R of the Act are prohibited in these water sources if the dealing involves:
  - (a) regulated river (conveyance) access licence WAL9422, or
  - (b) regulated river (high security) access licence WAL9423.
- (4) An access licence in the Murray Water Source may only be granted following cancellation of access licences in another water source if the Minister is satisfied that the issue of the licence will not result in the requirement to supply more water allocation from water storages upstream of the Barmah Choke to water access licences downstream of the Barmah Choke.

## **61 Assignment of water allocations dealings**

- (1) Dealings under section 71T of the Act within the same water source are prohibited in these water sources if the dealing involves an assignment of water allocations dealings:
  - (a) from an access licence that does not nominate a water supply work located downstream of the Barmah Choke to an access licence that nominates a water supply work downstream of the Barmah Choke, unless the Minister is satisfied that the assignment will not diminish the ability to fully supply all water orders that may result from water allocations already in the water allocation accounts of access licences that nominate a water supply work downstream of the Barmah Choke, or
  - (b) to a supplementary water access licence from an access licence of any other licence category, or  
**Note.** Dealings under section 71T of the Act within the same water source are prohibited from a supplementary water access licence to an access licence of any other category under the access licence dealing principles.
  - (c) from a local water utility access licence to an access licence of any other category if:
    - (i) the volume of water stored in Menindee Lakes is below 480,000 ML, or

- (ii) the volume stored in Menindee Lakes has not risen above 640,000 ML since the volume stored last fell below 480,000 ML.
- (2) A dealing is prohibited if it would result in a water allocation assignment from an access licence in one of these water sources to an access licence in another water source unless the water source is:
  - (a) the Murrumbidgee Regulated River Water Source,
  - (b) within the catchment of the Snowy River, or
  - (c) the other one of these water sources.
- (3) A dealing is prohibited if it would result in a water allocation assignment to an access licence in one of these water sources from an access licence in another water source unless the water source is:
  - (a) the Murrumbidgee Regulated River Water Source, or
  - (b) the other one of these water sources.
- (4) A dealing which would be permitted by subclause (2) or (3) is prohibited if, in the Minister's opinion, the supply of the volume of water allocation to the receiving access licence is not physically possible.
- (5) A dealing which would be permitted by subclause (2) or (3) is prohibited if, in the Minister's opinion, there is more than minimal likelihood that environmental water, domestic and stock rights, native title rights and the reliability of supply to all access licences in either of these water sources will be affected.

## **62 Interstate access licence transfer and assignment of water allocation**

- (1) Dealings under section 71U of the Act involving the interstate transfer of access licences to or from these water sources are prohibited unless:
  - (a) administrative arrangements have been agreed to and put in place by the States, and the interstate access licence transfer is made in accordance with these arrangements, and
  - (b) a conversion factor is applied to the share component of the new access licence that has been established by the Minister and published in an order made under section 71Z of the Act and other measures necessary to protect the reliability of

supply to remaining regulated river (general security) access licence holders in these water sources.

- (2) Subject to subclause (3), dealings under section 71V of the Act involving the interstate assignment of water allocations to or from access licences in these water sources are prohibited unless:
  - (a) administrative arrangements have been agreed to and put in place by the States, and the interstate access licence transfer is made in accordance with these arrangements, and
  - (b) a conversion factor is applied to the assigned water allocation that has been established by the Minister and published in an order made under section 71Z of the Act and any other measures necessary to protect environmental water, domestic and stock rights, native title rights and reliability of supply to all access licences in these water sources.
- (3) A dealing under subclause (2) is prohibited if, in the Minister's opinion:
  - (a) the supply of the water allocation arising from the assignment is not physically possible, or
  - (b) there is more than a minimal likelihood that the dealing will affect environmental water, domestic and stock rights, native title rights and reliability of supply to all access licences in either of these water sources.
- (4) Dealings under section 71U of the Act are prohibited in these water sources if the dealing involves:
  - (a) regulated river (conveyance) access licence WAL9422, or
  - (b) regulated river (high security) access licence WAL9423.

### **63 Nomination of water supply works dealings**

- (1) Dealings under section 71W of the Act are prohibited if the dealing involves an access licence that does not nominate a water supply work located downstream of the Barmah Choke being amended to nominate an access licence which nominates a water supply work located downstream of the Barmah Choke.
  - (2) Dealings under section 71W of the Act that involve the nomination of a water supply work located in a State other than NSW, by an access licence in this water source are
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prohibited, unless administrative arrangements have been agreed to and put in place by the States, and the interstate nomination of a water supply work is made in accordance with these arrangements.

- (3) Dealings under section 71W of the Act that involve the nomination of a water supply work in this water source by an access licence from a State other than NSW, are prohibited, unless administrative arrangements have been agreed to and put in place by the States, and the interstate nomination of a water supply work is made in accordance with these arrangements.

## Part 11 Mandatory conditions

**Note.** Part 12 allows for amendments to be made to this Part.

### Division 1 General

#### 64 General

In this Part:

- (a) a requirement to notify the Minister in writing will be satisfied by making a notification in writing to one of the addresses listed in Appendix 4 of this Plan or to the email address for the Department's Licensing Enquiries Information Centre, and

**Note.** At the commencement of this Plan, the email address for the Department's Licensing Enquiries Information Centre is [information@water.nsw.gov.au](mailto:information@water.nsw.gov.au).

- (b) a *metered water supply work with a data logger* means a water supply work with a data logger and a meter that complies with Australian Standard AS 4747, *Meters for non-urban water supply*, as may be updated or replaced from time to time, and

**Note.** The definition of *metered water supply work with a data logger* does not include all water supply works that are metered or that have a data logger. The water supply work must meet the parameters of this definition for the water supply work to be a metered water supply work with a data logger.

- (c) if the holder of a water supply work approval is the same as the holder of the access licence under which water is proposed to be taken, then it is not necessary to maintain two separate Logbooks and all the required information can be kept in one Logbook.

**Note.** *Logbook* is defined in the Dictionary.

### Division 2 Access licences

**Note.** This Division is made in accordance with sections 17 (c), 20 and 66 of the Act.

#### 65 General

- (1) Access licences in these water sources must have mandatory conditions where required to give effect to the following:

- (a) the relevant water allocation account management rules specified in Division 1
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- of Part 9 of this Plan,
- (b) the relevant access rules in Division 2 of Part 9 of this Plan,
  - (c) the holder of the access licence upon becoming aware of a breach of any condition of the access licence must:
    - (i) notify the Minister as soon as practicable, and
    - (ii) confirm this notification in writing within 7 days of becoming aware of the breach,
  - (d) a mandatory condition that facilitates the provisions of clause 37 of this Plan,
  - (e) any other condition required to implement the provisions of this Plan.
- (2) Access licences in these water sources, excluding access licences that nominate only metered water supply works with a data logger, must have mandatory conditions where required to give effect to the following:
- (a) the holder of the access licence must keep a Logbook,
  - (b) the holder of the access licence must record the following in the Logbook:
    - (i) each date and period of time during which water was taken under the access licence,
    - (ii) the volume of water taken on that date,
    - (iii) the water supply work approval number of the water supply work used to take the water on that date,
    - (iv) the purpose or purposes for which the water was taken on that date,
    - (v) any other information required to be recorded in the Logbook under the rules of this Plan,
  - (c) the holder of the access licence must produce the Logbook to the Minister for inspection, when requested,
  - (d) the holder of the access licence must retain the information required to be recorded in the Logbook for five years from the date to which that information relates.
- (3) The Minister may require the holder of the access licence that nominates only a
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metered water supply work with a data logger to keep a Logbook in accordance with any requirements of subclause (2).

- (4) All access licences, excluding supplementary water access licences, must have a mandatory condition that only allows the taking of water if it has been ordered in accordance with procedures established by the Minister:
- (5) All regulated river (general security) access licences must have mandatory conditions to give effect to the provisions in clause 50 of this Plan.
- (6) All supplementary water access licences must have mandatory conditions that only allow the taking of water in accordance with announcements, as specified in clause 54, and after satisfying any procedures established by the Minister.
- (7) All access licences in the Murray Water Source, other than supplementary water access licences, whose nominated works at the commencement of application of Chapter 3 of Part 2 of the Act in relation to the Murray Water Source are upstream of the Barmah Choke, must specify that extraction is only permitted upstream of the Barmah Choke.

### **Division 3 Water supply work approvals**

#### **66 General**

- (1) Water supply work approvals for water supply works in these water sources must have mandatory conditions where required to give effect to the following:
  - (a) the water supply work must not be used to take water under an access licence unless in compliance with the relevant access rules for the taking of water as specified in Division 2 of Part 9 of this Plan,
  - (b) unless exempted by the Minister by notice in writing, the approval holder must have metering equipment installed that meets the following requirements:
    - (i) the metering equipment must accurately measure and record the flow of all water taken through the water supply work,
    - (ii) the metering equipment must comply with Australian Standard *AS 4747, Meters for non-urban water supply*, as may be updated or replaced from time to time,

- (iii) the metering equipment must be operated and maintained in a proper and efficient manner at all times,
- (iv) the metering equipment must be sited and installed at a place in the pipe, channel or conduit between the water source and the first discharge outlet. There must be no flow of water out of the pipe, channel or conduit between the water source and the metering equipment,
- (v) any other requirements as to type, standard or other criteria for the metering equipment specified in the notice,

**Note.** The Minister may also direct a landholder or person to install, replace or properly maintain metering equipment under section 326 of the Act.

- (c) the approval holder must ensure that, if the water supply work is abandoned or replaced, it is decommissioned in accordance with any direction from the Minister. The Minister may direct that any such water supply work need not be decommissioned,
  - (d) within sixty days of the decommissioning of the water supply work, the approval holder must notify the Minister in writing that the water supply work has been decommissioned,
  - (e) the holder of the water supply work approval upon becoming aware of a breach of any condition of the approval must:
    - (i) notify the Minister as soon as practicable, and
    - (ii) confirm this notification in writing within 7 days of becoming aware of the breach,
  - (f) any other conditions required to implement the provisions of this Plan.
- (2) Water supply work approvals for water supply works in these water sources, excluding a water supply work that is a metered water supply work with a data logger, must have mandatory conditions where required to give effect to the following:
- (a) the holder of a water supply work approval must keep a Logbook,
  - (b) the holder of a water supply work approval must record the following in the Logbook:
    - (i) each date and period of time during which water was taken using the

- water supply work,
- (ii) the volume of water taken on that date,
  - (iii) the number of the access licence under which water was taken on that date, or, if water was taken under some other authority (such as basic landholder rights), the authority under which water was taken,
  - (iv) the purpose or purposes for which the water was taken on that date,
  - (v) details of any cropping carried out using the water taken through the water supply work including the type of crop, area cropped and dates of planting and harvesting,
  - (vi) where metering equipment has been installed for use in connection with the water supply work, the meter reading before water is taken,
  - (vii) where metering equipment has not been installed for use in connection with the water supply work, details of all pumping activities for the water supply work including pump running hours, pump power usage or pump fuel usage, pump start and stop times and pump capacity per unit of time,
  - (viii) any other information required to be recorded in the Logbook under the rules of this Plan,
- (c) the holder of the water supply work approval must produce the Logbook to the Minister for inspection when requested,
  - (d) the holder of a water supply work approval must retain the information required to be recorded in the Logbook for five years from the date to which that information relates.
- (3) The Minister may require the holder of a water supply work approval for a metered water supply work with a data logger to keep a Logbook in accordance with any requirements of subclause (2).
  - (4) Subclauses (1) – (3) do not apply to a water supply work approval for water supply works held by Water NSW.
  - (5) Water supply work approvals held by Water NSW must have mandatory conditions where required to give effect to the system operation rules in Part 6 of this Plan.

## Part 12 Amendment of this Plan

### 67 General

- (1) Amendments specified throughout this Plan and in this Part are amendments authorised by this Plan.
- (2) An amendment authorised by this Plan is taken to include any consequential amendments required to be made to this Plan to give effect to that particular amendment.  
**Note.** For example, if Part 1 is amended to add a management zone, this may require amendments to other parts of this Plan to include rules for that management zone.
- (3) An amendment authorised by this Plan which results in a variation of the bulk access regime is an amendment authorised by this Plan for the purposes of section 87AA of the Act.

### 68 Part 1

Part 1 may be amended to add a river or section of river to these water sources or remove a river or section of river from these water sources provided that:

- (a) any river or section of river that is added has been declared to be a regulated river by an order published in the Gazette, and
- (b) the Minister is satisfied that there will be no impact on environmental water or on the available water to any access licences in these water sources.

### 69 Part 7

Following the surrender under section 77 of the Act of an access licence and then the cancellation under section 77A (6) of the Act of an access licence in these water sources, the Minister may vary the respective long-term average annual extraction limit that applies to these water sources.

### 70 Part 11

Part 11 may be amended to do any of the following:

- (a) amend the rules in relation to record keeping including in relation to requirements for Logbooks,

- (b) amend clause 66 to specify different standards or requirements for decommissioning water supply works or construction requirements for water supply works.

## **71 Dictionary**

The Dictionary may be amended to add, modify or remove a definition.

## **72 Other**

- (1) This Plan may be amended to include rules for the management of floodplain harvesting within these water sources, so long as the amendment does not:
  - (a) affect the outcomes of the long-term average annual extraction limit specified in this Plan, or
  - (b) allow more water being taken pursuant to access licences for floodplain harvesting than permitted under the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth.
- (2) Consequential amendments may be made to this Plan as a result of an amendment to the Act or regulations.
- (3) This Plan may be amended following the granting of a native title claim pursuant to the provisions of the *Native Title Act 1993* of the Commonwealth to give effect to an entitlement granted under that claim.
- (4) This Plan may be amended to enable this Plan, or any part of this Plan, to be accredited as part or all of a water resource plan under the *Water Act 2007* of the Commonwealth.
- (5) This Plan may be amended to provide rules for the protection of water-dependent Aboriginal cultural assets to do any of the following:
  - (a) identify water-dependent Aboriginal cultural assets,
  - (b) restrict the granting and amending of water supply work approvals to protect water-dependent Aboriginal cultural assets,
  - (c) amend the dealing rules to protect water-dependent Aboriginal cultural assets.
- (6) Any amendment under subclause (5) will take into account the socio-economic impacts of the proposed change and the environmental water requirements of these

water sources.

- (7) Before making an amendment pursuant to subclause (5) the Minister should consult with relevant Government agencies and stakeholders.

## Dictionary

**Note.** Unless otherwise defined in this Plan, words and expressions that are defined in the Act or in the regulations have the same meaning in this Plan.

*Aboriginal person* has the same meaning as it has in the *Aboriginal Land Rights Act 1983*.

*airspace* is a volume in a *water storage*, which is kept empty for the purpose of mitigating potential floods.

*floodplain harvesting* is the collection, extraction or impoundment of water flowing across the floodplain.

*Logbook*, in relation to an access licence or water supply work approval, means a written record, kept in hard copy or electronic form, that accurately records all information required to be kept in relation to the access licence or water supply work approval under the rules of this Plan.

*reserves* are volumes of water put aside in a *water storage* to allow the supply of future water requirements.

*supplementary water event* is a continuous period during which the taking of water under supplementary water access licences is being permitted in all or part of the water source.

*supply capability* is defined as the rate at which water that can be supplied to a section of a water source after satisfying the environmental water provisions and the requirements for water to satisfy basic land holder rights.

*transmission losses* are any loss of water volume, through natural influences such as evaporation or seepage, which occurs as water travels down a river.

*water storage* means the water body impounded by a dam, weir or other structure, which is used to regulate and manage river flows in these water sources.

*water supply system* includes the water storages and all other factors influencing water supply that are under the control of the Minister.

*water use development* includes all privately owned water management structures, and all aspects of farm, industry, town or private household development which affect the volumes of water taken from these water sources, and the management practices that are applied in relation to them.

## Appendix 1 Rivers and lakes in the regulated river orders

**Note.** Under the Act regulated rivers are defined by an order made by the Minister. This appendix lists the rivers and the lakes that were in the orders at the commencement of this Plan. This appendix is provided for informational purposes only. The legally binding version of the regulated river orders is published in the NSW Government Gazette. As at the commencement of this Plan the Regulated River Order for the NSW Murray Regulated Rivers Water Source was found in NSW Government Gazette No 19 on 15 February 2012 at page 417. As at the commencement of this Plan the Regulated River Order for the Lower Darling Water Source was found in the NSW Government Gazette No 110 on 1 July 2004 at page 5500.

- (1) As at the commencement of this Plan, the New South Wales Murray Regulated Rivers Water Source includes but is not limited to:
  - (a) Aluminy Creek from the boundary of Lots 48 and 67 DP 756261, Easting: 332491, Northing: 6038423 UTM Zone 55 GDA, Parish of Bungooka, County of Townsend to its confluence with the Bullatale Creek within Lot 48 DP 756261, Easting: 332853, Northing: 6039604 UTM Zone 55 GDA, Parish of Bungooka, County of Townsend.
  - (b) Barbers Creek from upstream (eastern) boundary in Lot 13, Parish of Moorangatta, County Wakool, to its confluence with the Wakool River in Lot 15, Parish Nunnagoyt, County Wakool,
  - (c) Benanee Creek,
  - (d) Black Swan Lagoon,
  - (e) Bookit Creek from its effluence from Merribit Creek between Lots 23 and 39, Parish of Mia Mia, County of Wakool downstream to a dam and regulator located between Lots 4 and 10, Parish of Mia Mia, County of Wakool authorised by Licence L15918,
  - (f) Bullanginya Lagoon,
  - (g) Bullatale Creek from its confluence with Seven Mile Creek within Lot 8 DP 740336, Easting: 338351, Northing: 6038396 UTM Zone 55 GDA, Parish of Bungooka, County of Townsend to its confluence with the Edward River within Lot 27 DP 756275, Easting: 318125, Northing: 6058937 UTM Zone 55 GDA, Parish of Derrulaman, County of Townsend.
  - (h) Collendina Lagoon,

- (i) Colligen Creek, from its offtake from the Edward River, Lot 2, DP 857161 Parish of Tumudgery, County of Townsend, downstream to its confluence with the Niemur River within Werai State Forest No 384, Parish of Werai, County of Townsend,
- (j) Coobool Creek, from the southern boundary (bridge on disused rail line), of Lot 32, Parish Toolmah, County Wakool, to its confluence with the Wakool River, boundaries of Lots 2 and 3, Parish of Coobool, County Wakool,
- (k) Dairy Lagoon, offtaking from the Murray River at the southern end of Lot 7014, DP 1021139, in the Reserve 78631, Parish of Corowa, County of Hume,
- (l) Darling River—Wentworth Weir Pool, from the north east corner of Lot 11 DP 756952, Parish of Merche, County of Wentworth downstream to the confluence with the Murray,
- (m) Deep Creek, from its confluence with the Murray River between part Lot 19 and Lot 76, Parish of Benarca, County of Cadell to its upper limits within Lot 76, Parish of Benarca, County of Cadell,
- (n) Dights Creek,
- (o) Dry Lake, Parish of Taila, County of Taila,
- (p) Edward River; from its offtake from the Murray River downstream to its junction with the Wakool River,
- (q) Frenchmans Creek,
- (r) Gol Gol Channel, the unnamed watercourse known locally as Gol Gol Channel, commencing at a point where Gol Gol Creek enters Gol Gol Swamp downstream to its point of termination with the southern section of Lot 16, Parish Gol Gol, County of Wentworth,
- (s) Gol Gol Creek, Parish of Gol Gol, County of Wentworth,
- (t) Gol Gol North Creek, Parish of Gol Gol, County of Wentworth,
- (u) Great Anabranh of the Darling River, from its confluence with the Murray River on Lot 672 DP 761719 to the location of the earthen block bank under Licence 60SL8686, Lot 12 DP 756168,

- (v) Gulpa Creek,
- (w) Gum Creek, from earthen block bank and regulator in Lot 45, Parish Toolmah, County Wakool, to its confluence with the Wakool River, Lot 74, Parish Coobool, County Wakool,
- (x) Jingera Jingera Lagoon, from its junction with unnamed watercourse offtaking from the Murray River within Lot 162, Parish of Albury, County of Goulburn, downstream to its confluence with the Murray River,
- (y) Lake Benanee,
- (z) Lake Mulwala,
- (aa) Lake Victoria,
- (ab) Larrys Creek, from its junction with Mulligans Creek in Lot 26, Parish Toolmah, County Wakool, to an earthen block bank and regulator in Lot 45, Parish of Toolmah, County Wakool,
- (ac) Lesters Lagoon,
- (ad) Little Barbers Creek, offtaking from Merran Creek in Lot 25, Parish Nunnagoyt, County Wakool, to its confluence with Barbers Creek in Lot 25, Parish Nunnagoyt, County Wakool,
- (ae) Little Murray River; offtaking from the Murray River within Campbells Island State Forest, (in the vicinity of Easting: 236685, Northing: 6057818, zone 55) to its confluence with the Murray River at the northern end of Lot 13, DP 756541, Parish of Gonn, County of Wakool,
- (af) Merangatuk Creek, from its offtake from Wakool River in Lot 23 DP 756525, Easting: 238573, Northing: 6070395, UTM Zone 55 GDA, Parish of Cobwell, County of Wakool to a crossing in Lot 4 DP 756525, Easting: 237508, Northing: 6068895, UTM Zone 55 GDA, Parish of Cobwell, County of Wakool,
- (ag) Merran Creek Cutting, offtaking from the Little Murray River in Campbells Island State Forest, Parish Nunnagoyt, County Wakool, to its confluence with Merran Creek, Lot 14, Parish Nunnagoyt, County Wakool,
- (ah) Merran Creek, from block dam and regulator in Lot 21, Parish Nunnagoyt,

County Wakool, to its confluence with the Wakool River in Lot 36, Parish Poon Boon, County Wakool,

- (ai) Merribit Creek, from its effluence from the Wakool River between Lot 143, Parish of Bookit, County of Wakool and Lot 47, Parish of Mia Mia, County of Wakool to its confluence with the Wakool River between Lot 125, Parish of Toolon, County of Wakool and Lot 46, Parish of Mia Mia and County of Wakool,
- (aj) Moira Creek,
- (ak) Mulligans Creek, offtaking from St Helena Creek in Lot 12, Parish Moorangatta, County Wakool, to its confluence with Larrys Creek in Lot 26, Parish Toolmah, County Wakool,
- (al) Murray River, from the eastern border of Lot 1 DP 611939 downstream to the South Australian border,
- (am) Neimur River, from its confluence with Colligen Creek within Werai State Forest No 384 to its confluence with the Wakool River in Lots 21, Parish of Wetuppa and 48, Parish of Coobool both in the County of Wakool,
- (an) Nowranie Creek,
- (ao) Paddock Lagoon,
- (ap) Porthole Creek, from its confluence with the Wakool River between Lots 3 and 77, Parish of Porthole, County of Cadell upstream to the Boundary between Lots 3 and 72, Parish of Porthole, County of Cadell,
- (aq) Ruel Lagoon,
- (ar) Rufus River, except for the meander loop between the upstream blockbank in the vicinity of Easting: 524796, Northing: 6232373 and the downstream blockbank in the vicinity of Easting: 524714, Northing: 6232473,
- (as) Salt Creek, from its offtake from the Murray River within WL 165, Parish of Cal Lal, County of Tara to its intersection with the South Australian Border,
- (at) Sheepwash Creek,
- (au) Sheepwash Lagoon, offtaking from the Murray River in Lot 1 DP 751155,

Parish of Perricoota, County of Cadell and bounded by Lot 1 DP 751155, Lot 2 DP 521201 and Lot 1 DP 131403, Parish of Perricoota, County of Cadell,

- (av) St Helena Creek, from a concrete regulator in Lot 3, Parish Moorangatta, County Wakool, to its confluence with the Wakool River in Lot 42, Parish of Toolmah, County Wakool,
- (aw) Taila Creek, offtaking from the Murray River in Lot 4441, DP 76426 in the Parish of Taila, County of Taila to Lake Benanee,
- (ax) Tallys Lake, from the confluence of the Unnamed Watercourse (Box Creek) in Lot 55, Parish Merran, County Wakool, to the offtake of the Unnamed Watercourse (Box Creek) in Lot 54, Parish Merran, County Wakool,
- (ay) Tuckers Creek,
- (az) unnamed lagoon, (known locally as Blue's Lagoon), from its offtake from Gulpa Creek in Lot 49 DP 756303, Easting: 311703, Northing: 6033616, UTM Zone 55 GDA, Parish of Nallam, County of Townsend to a crossing in Lot 49 DP 756303 Easting: 311893, Northing: 6034295, UTM Zone 55 GDA, Parish of Nallam, County of Townsend,
- (ba) unnamed lagoon, (known locally as Cemetery Creek), offtaking in part Temporary Common, Parish of Euston, County of Taila,
- (bb) unnamed lagoon, (known locally as Doctors Point Lagoon) offtaking from Murray River between Lots 317 and 26, Parish of Albury, County of Goulburn,
- (bc) unnamed lagoon and watercourse, (known locally as Parlour or Howlong Creek), offtaking from the Murray River within Lot 63, Parish of Bungowannah, County of Hume, to its junction with Lesters Lagoon,
- (bd) unnamed lagoon, offtaking from Colligen Creek in Lot 6, Parish of Tumudgery, County of Townsend,
- (be) unnamed lagoon, offtaking from Murray River in Lot 2, Parish of Boomanoomana, County of Denison,
- (bf) unnamed lagoon, offtaking from the Murray River between Lots 16 and 18, Parish of Woperana, County of Denison,
- (bg) unnamed lagoon, offtaking from the Murray River between Lots 29 and 65,

Parish of Quat Quatta, County of Hume, and also between Lots 20 and 68,

- (bh) unnamed lagoon, offtaking from the Murray River in Lot 10, Parish of Wangumma, County of Tara,
- (bi) unnamed lagoon, offtaking from the Murray River in Lot 4, Parish of Collendina, County of Hume,
- (bj) unnamed lagoon, offtaking from the Murray River in W.L. 673, Parish of Moorna, County of Tara,
- (bk) unnamed lagoon, offtaking from the Murray River within Lot 298 Parish of Corowa, County of Hume,
- (bl) unnamed lagoons, connected to the Murray River and situated within Lots 298, 297 and 299, Parish of Corowa, County of Hume,
- (bm) unnamed watercourse, anabranch of the Murray River offtaking between Lots 80 and 83, forming the northern boundary of Lot 79, traversing Lot 92 and rejoining the Murray River within Lot 29, Parish of Quat Quatta, County of Hume,
- (bn) unnamed watercourse and effluents, (known locally as Breakaway Creek) offtaking from the Murray River in Lot 14, Parish of Bungowannah, County of Hume,
- (bo) unnamed watercourse and effluents, (known locally as Yellowbelly Creek) offtaking from the Murray River in Lot 3, Parish of Bungowannah, County of Hume,
- (bp) unnamed watercourse and lagoon, connecting Lesters Lagoon with Black Swan Lagoon, Parish of Howlong, County of Hume,
- (bq) unnamed watercourse, (Box Creek), offtaking from Coobool Creek in Lot 48, Parish Toolmah, County Wakool, to Tallys Lake in Lot 55, Parish Merran, County Wakool,
- (br) unnamed watercourse, (Box Creek), Offtaking from Tallys Lake in Lot 54, Parish Merran County Wakool, to earthen block dam and pipe regulator in Lot 12, Parish Merran, County Wakool,
- (bs) unnamed watercourse, (known as Hemp Creek) offtaking from the Bookit

Creek in Lot 4 DP 756559, Parish of Mia Mia, County of Wakool to the eastern boundary of Lot 4 DP 756559, Parish of Mia Mia, County of Wakool,

- (bt) unnamed watercourse, (known locally as Boilingdown Creek), offtaking from the Murray River within Lot 524, Parish of Corowa, County of Hume, and rejoining the Murray River within Collendina State Forest No 98, block 1,
- (bu) unnamed watercourse, (known locally as Hans Creek), offtaking from the Murray River, within Lot 199, Parish of Corowa, County of Hume,
- (bv) unnamed watercourse, (known locally as Horseshoe Lagoon), offtaking from the Murray River between Lots 12 and 46, Parish of Tocumwal, County of Denison,
- (bw) unnamed watercourse, connected to the Edward River within section 60, Town of South Deniliquin, Parish of South Deniliquin, County of Townsend, for a distance of 200 metres south easterly from the point of connection,
- (bx) unnamed watercourse, connecting Washpen Creek with Lake Caringay,
- (by) unnamed watercourse, from its offtake from the Edward River in Lot 78 (T S & C R 35646) Parish of Tumudgery, County of Townsend to its confluence with Colligen Creek in Lot 47 Parish of Tumudgery, County of Townsend,
- (bz) unnamed watercourse, offtaking from an unnamed lagoon within that part of Collendina State Forest No 98 east of Lot 9, Parish of Collendina, County of Hume,
- (ca) unnamed watercourse, offtaking from another unnamed watercourse within Lot 64, Parish of Bungowannah, County of Hume, and traversing downstream successively, in a north westerly direction, Lots 275, 257, 241, 240, 248, 249, 250, 251, 172 and 171 Parish of Howlong, County of Hume to its confluence with Lesters Lagoon, 80. unnamed watercourse, offtaking from Gum Creek in Lot 49, Parish Toolmah, County Wakool, to its confluence with Coobool Creek in Lot 49, Parish Toolmah, County Wakool,
- (cb) unnamed watercourse, offtaking from the Murray River within Lot 162, Parish of Albury, County of Goulburn, downstream to its confluence with Jingera Jingera Lagoon,

- (cc) unnamed watercourse, offtaking from the Murray River within Lot 23, Parish of Albury, County of Goulburn,
- (cd) unnamed watercourse, offtaking from the Murray River within Lot 34, Parish of Albury, County of Goulburn,
- (ce) unnamed watercourse, offtaking from the Murray River within Lot 5, Parish of Wangumma, County of Tara,
- (cf) unnamed watercourse, offtaking from the Murray River within Lot 56, Parish of Bungowannah, County of Hume,
- (cg) unnamed watercourse, offtaking from the Murray River within that part of Mulwala State Forest No 100 west of Lot 209, Parish of Mulwala, County of Denilson,
- (ch) Waddy Creek, from Lot 2 DP 868793, Easting: 752182, Northing: 6081449, UTM Zone 54 GDA, Parish of Mellool, County of Wakool to its confluence with Merran Creek in Lot 1, DP 858048, Easting: 748567, Northing: 6087017, UTM Zone 54 GDA, Parish of Willakool, County of Wakool,
- (ci) Waddy Creek Cutting, from its offtake from the Murray River in Lot 1 DP 868793, Easting: 750976, Northing: 6080045, UTM Zone 54 GDA, Parish of Willakool, County of Wakool to its confluence with the Waddy Creek in Lot 2 DP 868793, Easting: 751915, Northing: 6081546, UTM Zone 54 GDA, Parish of Mellool, County of Wakool,
- (cj) Wakool River, from its offtake on the Edward River downstream to its confluence with the Murray River,
- (ck) Washpen Creek, to a point 805 metres upstream of the junction of the Unnamed Watercourse connecting Washpen Creek with Lake Caringay, and
- (cl) Yallakool Creek, from its effluence from the Edward River between TS & CR 25840, Parish of Brassi, County of Townsend and Lot 78, Parish of Tumudgery, County of Townsend and its confluence with the Wakool River between Lot 54, Parish of Gobran, County of Townsend and Lot 3, Parish of Corry, County of Wakool.

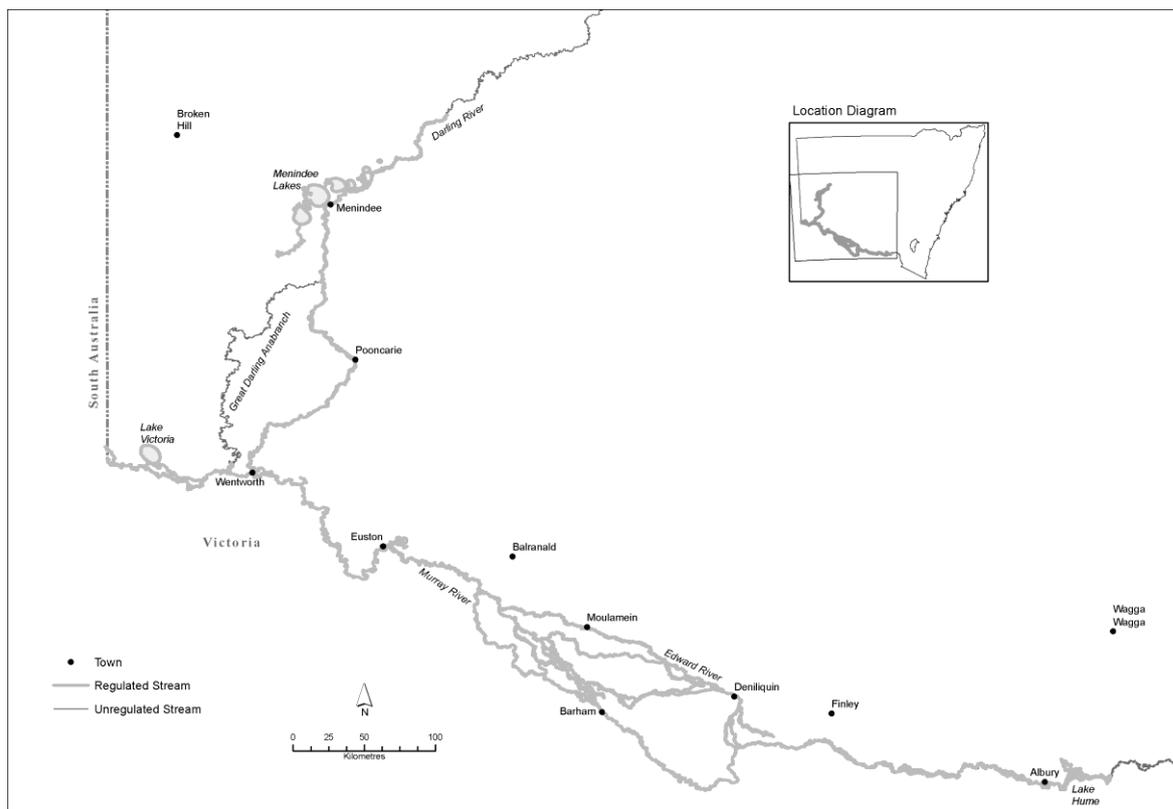
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Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources  
2016

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## Appendix 2 Overview Map of the Murray Water Source and the Lower Darling Water Source

Overview Map of the Murray Water Source and the Lower Darling Water Source



### **Appendix 3      Operational guidelines for delivering flows prescribed by the Murray Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth**

The following operational guidelines are to operate so that they do not contravene Parts V to XI of the Murray Darling Basin Agreement nor the intentions of that Agreement where they relate to the interstate sharing for the responsibility for the environmental management of the Murray-Lower Darling Rivers.

**Note.** Unless otherwise stated the flows noted in this section are provided out of combined resources as per the Murray Darling Basin Agreement.

*Provide 1,850 GL per annum to the Murray at the South Australian Border*

A total contribution of 1,850 GL per annum is provided to the South Australian Border as per the Murray Darling Basin Agreement. This is a minimum flow and is assented to by the Basin State Governments as well as the Commonwealth Government. The plan is constrained by the need to provide the daily flows indicated below.

*Total Contribution to South Australian Entitlement*

<b>Month</b>	<b>Monthly entitlement Total contribution (ML)</b>	<b>Daily flow at the South Australian Border (ML/day)</b>
January	217,000	7,000
February	194,000	6,929
March	186,000	6,000
April	135,000	4,500
May	93,000	3,000
June	90,000	3,000
July	108,500	3,500
August	124,000	4,000
September	135,000	4,500
October	170,500	5,500
November	180,000	6,000
December	217,000	7,000
<b>Total</b>	<b>1,850,000</b>	

*Additional Dilution Flow to South Australia*

In 1987, as part of the MDBC Salinity and Drainage Strategy, it was agreed that South

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Australia would be entitled to additional water to mitigate the impacts of surface water salinity. This volume, known as additional dilution flow, is only provided when the storage volumes in the Menindee Lakes exceed nominated trigger points, at the same time the combined storage volume of Hume and Dartmouth Reservoirs also exceed nominated triggers. The trigger volumes within the Menindee Lakes vary between months.

When these trigger volumes are exceeded, South Australia is entitled to an additional flow of 3,000 ML/day, 1,500 ML of which is from NSW resource.

It is recognised that these additional dilution flows have contributed to the reduction in the impact of salinity. It is recommended, however, that these additional dilution flows be monthly totals rather than daily totals so that greater flexibility is available which can be translated into maximising both salinity and ecological outcomes.

*Storage level triggers for additional dilution flow to South Australia*

<b>Figures are ML</b>	<b>Jan</b>	<b>Feb</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
<b>Menindee Lakes trigger</b>	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	1,650,000
<b>Hume/Dartmouth trigger</b>	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
<b>Figures are ML</b>	<b>July</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>Menindee Lakes trigger</b>	1,650,000	1,500,000	1,300,000	1,300,000	1,300,000	1,300,000
<b>Hume/Dartmouth trigger</b>	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000

*Minimum flows from Hume Dam*

Minimum flows from combined resources are to be maintained out of Hume Dam to ensure that down stream diversion needs are met, as well as for environmental maintenance and water quality purposes. The minimum flows are currently as follows:

- (c) Minimum flows downstream of Hume Dam up stream of the Kiewa River are 600 ML/day.
- (d) Minimum flows downstream of Hume Dam at Doctors Point are 1,200 ML/day.

*Minimum flows downstream of the Curlwaa pumps on the Murray*

Minimum flows from combined resources are to be maintained downstream of the Curlwaa Irrigation District pumps on the Murray River during summer to ensure that

down stream diversion needs are met, as well as for environmental maintenance and water quality purposes. The recommended minimum flow is 1,200 ML/day during summer.

- (e) The rates may be reduced below their minimum recommended flows if river conditions are not conducive to the production of blue green algae as determined by the Department of Land and Water Conservation in consultation with the MDBC.

*Minimum flows from Menindee Lakes to the Lower Darling River*

In order to maintain appropriate minimum flow rates from the Menindee Lakes to the Lower Darling River to maintain water quality and river health and minimise the occurrence of algal blooms the following are recommended minimum releases from Weir 32.

- (f) The rates may be reduced below their minimum recommended flows if river conditions are not conducive to the production of blue green algae as determined by the Department of Land and Water Conservation in consultation with the MDBC.

*Minimum recommended flows for the mitigation of blue green algae in the Lower Darling River*

<b>Month</b>	<b>ML/day</b>
Jan	350
Feb	350
Mar	350
Apr	300
May	200
Jun	200
Jul	200
Aug	200
Sep	200
Oct	200
Nov	300
Dec	300

*Using Barmah Millewa Environmental Water Allocation to Provide Flow to the Werai Forest*

Flows that are provided for flooding to the Barmah Millewa Forests under

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environmental flow rule and which are diverted through the Edward/Wakool system are to be managed to provide flood flows to the Werai Forest below Stevens Weir where possible.

*Acceptance of Rainfall Rejection Events*

- (g) NSW is to accept rainfall rejection events in the Murray River above the Barmah Choke every second year. NSW is to manage rainfall rejection events in the Murray River above the Barmah Choke in the year 2001.
- (h) Victoria manages rainfall rejection events in the alternate years.
- (i) NSW management of rainfall rejection is to mitigate the detrimental effects that such unseasonal flows would have on the forest ecosystems within the influence of the Barmah Choke.

*Winter Draw down of Stevens Weir Pool*

- (j) Maintain the Stevens weir pool at summer irrigation supply level until one week after the Easter school holidays,
- (k) At the time the summer irrigation season demands are reducing, Stevens weir pool is to be drawn down in steps equivalent to reduction in demand,
- (l) Weir pool draw down rates are to be no greater than 150 mm/day except where a greater rate reflects natural conditions,
- (m) Weir pool reinstatement rates (rise) are to be no greater than 300 mm/day except where a greater rate reflects natural conditions,
- (n) Unregulated flows into the Edward River are to be passed through Edward/Wakool river system alternately to the Wakool river and the Edward river down stream of Stevens weir.
- (o) If unregulated flows have not occurred by mid August to raise Stevens weir pool, the weir pool will be raised slowly in accordance with irrigation season start up requirements using regulated supply.

*Winter Weir Pool Manipulation—Rise and Draw Down*

Where possible all weir pools, including Lake Wetherell, and Lock 9, along the NSW Murray and Lower Darling rivers are to be managed for winter draw down in a similar

manner as that of Stevens weir pool, as relates to their specific hydrology.

*Rates of Rise and Fall*

In order to minimise bank deterioration and unless natural conditions or other environmental flows dictate otherwise the following rates of rise and fall are to apply within the river channel.

**i) Weir pools and Rivers, Streams and Waterways**

- (p) Weir draw down rates be no greater than 150 mm per day except where a greater rate reflects natural conditions,
- (q) Weir pool reinstatement rates (rises) to be no greater than 300 mm per day except where a greater rate reflects natural conditions.

*Lower Darling Flows from Menindee Lakes*

- (r) Where total storage volume in the Menindee Lakes will exceed 1,680,000 ML, flow release patterns should be implemented which provides a hydrograph of similar shape to that of a 'natural flood event', consistent with the protection of property as far as possible.
- (s) Following extended periods of high flow greater than three weeks, apply the following recommended rates of reductions and monitor and record the effect of this action:
- (t) For within channel flows greater than 20,000 ML/day downstream of Menindee, reduce at a
- (u) similar rate of recession as occurred upstream of the lakes at Wilcannia.
- (v) For flows greater than 10,000 ML/day and less than 20,000 ML/day, releases should be reduced at no greater than 1,000 ML/day each day.
- (w) For flows greater than 5,000 ML/day and less than 10,000 ML/day, releases should be reduced at no greater than 500 ML/day each day.
- (x) For flows less than 5,000 ML/day, releases should be reduced at no greater than 250 ML/day each day.

*Menindee Lakes*

Environmental flows for the Menindee Lakes are not included in this Plan.

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## **Appendix 4      Offices**

Any notifications that may be required to be made to the Minister, as specified in this Plan, can be made to one of the following offices:

DPI Water  
Department of Industries  
10 Valentine Ave  
Locked Bag 5123  
PARRAMATTA NSW 2124

DPI Water  
Department of Industries  
8-20 Edwardes Street  
PO Box 205  
Deniliquin NSW 2710

DPI Water  
Department of Industries  
Midway Village 32 Enterprise Way  
PO Box 363  
Buronga NSW 2739

DPI Water  
Department of Industries  
512 Dean Street  
PO Box 829  
Albury NSW 2640