



New South Wales

Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2020

under the

Water Management Act 2000

I, Melinda Pavey, the Minister for Water, Property and Housing, do, by this Order, in pursuance of section 50 of the *Water Management Act 2000*, make the following Minister's plan, being the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2020*.

Dated this day of 2020.

Minister for Water, Property and Housing

Explanatory notes

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

This Order is made under section 50 of the *Water Management Act 2000*. The concurrence of the Minister for Energy and Environment was obtained prior to the making of this Plan.

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Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2020

Notes.

- 1 In accordance with section 48 of the *Water Management Act 2000*, the Minister must take all reasonable steps to give effect to the provisions of this Plan when exercising functions under the Act.
- 2 In accordance with section 49 of the *Water Management Act 2000*, public authorities must also have regard to the provisions of this Plan to the extent they apply to the public authority.
- 3 The Minister may amend this Plan at any time under section 45 of the *Water Management Act 2000*, including if satisfied it is in the public interest to do so, or in such circumstances, in relation to such matters and to such extent as Part 12 provides.

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2020 (this Plan)*.

2 Nature and status of this 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 for the purposes of another section of the Act, the section is referred to in the notes to this Plan.

3 Commencement

This Plan commences on 1 July 2020.

Notes.

- 1 This Plan replaces the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016*.
- 2 In accordance with section 43 of the Act, this Plan will have effect for 10 years from 1 July 2020. 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 consistent with the requirements of the Basin Plan. This Plan was made in 2020, partly to meet NSW's commitments under these agreements. Certain provisions of this Plan form part of the water resource plan for the New South Wales Murray and Lower Darling surface water resource plan area.
- 4 **Basin Plan** is defined in the Dictionary.

4 Application of Plan

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

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 water in the Murray Water Source consists of the water between the banks of all rivers, from Hume Reservoir, and from the Darling River at the north east corner of Lot 11 DP 756952, Parish of Merche, County of Wentworth, and from the Great Anabranche of the Darling River at Lot 12, DP 756168, downstream to the South Australian border, that have been declared by the Minister to be regulated rivers.

Note. The *Regulated River Order for the NSW Murray Regulated Rivers 2012* was made by the Minister and published in the NSW Government Gazette No 19 on 15 February 2012 at page 417, and amended as set out in paragraph 28 of Schedule 12 of the Act.

- (3) The water in the Lower Darling Water Source consists of the water between the banks of all rivers, from Lake Wetherell water storage downstream to the north east corner of Lot 11 DP 756952, Parish of Merche, County of Wentworth, that have been declared by the Minister to be regulated rivers.

Note. The *Murray Water Management Area Regulated River Order (Lower Darling)* was made by the Minister and published in the NSW Government Gazette on 1 July 2004, and amended as set out in paragraph 22 of Schedule 12 of the Act. An overview map of the regulated rivers is at Appendix 1.

5 Interpretation

- (1) 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.
- (2) Words and expressions that are defined in the Dictionary at the end of this Plan have the meaning set out in the Dictionary.
- (3) Unless otherwise specified, 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) A number in brackets following the name of a gauge is the gauge number.
- (6) Notes in the text of this Plan do not form part of this Plan.

- (7) Appendices to this Plan do not form part of this Plan.

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Part 2 Vision, objectives, strategies and performance indicators

Notes.

- 1 This Part is made in accordance with section 35 (1) of the Act.
- 2 A monitoring, evaluation and reporting (*MER*) plan has been developed for water sources in the New South Wales Murray and Lower Darling surface water resource plan area, which includes the water sources, and is available on the Department's website. The MER plan describes the following:
 - (a) guidelines and principles for developing broad and targeted objectives, strategies and performance indicators,
 - (b) selection criteria used to identify target ecological populations,
 - (c) selection criteria for identifying priority monitoring locations for targeted objectives,
 - (d) selection criteria used to identify external influences that may affect the success of achieving objectives or implementing strategies.
 - (e) selection criteria used to determine how the objectives to 'protect' or 'enhance' will be measured for different target populations and performance indicators,
 - (f) which strategies contribute to the achievement of which objectives.
- 3 This Part describes broad objectives, which are the long term outcomes sought by this Plan and are not directly measured but evaluated by considering the cumulative achievement of the associated targeted objectives. Targeted objectives described in this Part are specific outcomes that can be achieved by the strategies in this Plan and can be directly measured so that success or failure to achieve the objective can be quantified.

6 Acknowledgement

Respect is paid to the traditional owners of this country, who are acknowledged as the first natural resource managers within the Lower Murray-Darling Water Management Area.

7 Vision statement

The vision for this Plan is to provide for the following:

- (a) the health and enhancement of the water source and its water-dependent ecosystems,
- (b) the continuing productive extraction of surface water for economic benefit,
- (c) the spiritual, social, customary and economic benefits of surface water to Aboriginal communities,
- (d) social and cultural benefits to urban and rural communities that depend on surface water.

8 Environmental objectives

- (1) The broad environmental objective of this Plan is to protect and, where possible, enhance the ecological condition of the water sources and their water-dependent ecosystems over the term

of this Plan.

Note. The ecological condition of the water sources will be assessed by reference to the condition of high ecological value aquatic ecosystems, target species, communities, populations and key ecosystem functions as defined in the MER plan for the water sources. Water-dependent ecosystems in the water sources include instream, riparian and floodplain ecosystems.

(2) The targeted environmental objectives of this Plan are as follows:

(a) to protect, and where possible enhance, the following over the term of this Plan:

(i) the recorded distribution or extent, and the population structure, of target ecological populations,

Notes.

- 1 **Target ecological populations** is defined in the Dictionary.
- 2 Target ecological populations in the water sources that may be managed by this Plan include known or predicted populations of the following:
 - (a) native fish including Murray cod, flat headed galaxias, southern pygmy perch, trout cod, golden perch and silver perch,
 - (b) native vegetation including river red gum and black box,
 - (c) high diversity hotspots and significant habitat for native fish, frogs, waterbirds and native vegetation.
- 3 Measures of population structure may include the abundance or spatial extent of a species, different age classes or life stages within a species population, or measures that describe the health and condition of species or populations.

(ii) the longitudinal and lateral connectivity within and between water sources to support target ecological processes,

Notes.

- 1 Longitudinal connectivity means flows along the length of the river and between hydrologically connected rivers. Lateral connectivity means flows between the river and its anabranches, riparian zones, wetlands and floodplains.
- 2 Target ecological processes in the water sources include the following:
 - (a) carbon and nutrient transport pathways, which are the connected networks of streams, riparian zones, floodplains and wetlands that transport dissolved and suspended organic material and nutrients throughout the water sources,
 - (b) fish movement across significant barriers, as identified by NSW Department of Primary Industries Fisheries and described in the MER plan for the water sources.
- 3 Connectivity may be within the water sources or between the water sources and other water sources.

(iii) water quality within target ranges for the water sources to support water dependent ecosystems and ecosystem functions,

Note. Water quality targets for the water sources are defined in the Water Quality Management Plan for the Murray and Lower Darling Water Resource Plan Area (SW8) and the NSW State Water Quality Assessment and Monitoring Plan.

- (b) to support environmental watering in the water source to contribute to maintaining or enhancing ecological condition in streams, riparian zones, dependent wetlands and floodplains.

Note. Division 1 and Division 2 of Part 10 outline the provisions for the environmental water allowances in the Murray Water Source and Lower Darling Water Source. These environmental water allowances are managed by the NSW Environmental Water Manager.

- (3) The strategies for reaching the targeted environmental objectives of this Plan are as follows:

- (a) reserve all water in excess of the long-term average annual extraction limit and long-term average sustainable diversion limit for the environment,

Note. Part 4 of this Plan reserves all water remaining above the long-term average annual extraction limit and long-term average sustainable diversion limit for the environment. This contributes to the protection of target ecological populations.

- (b) reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in the water sources, and

Notes.

- 1 **Flow regimes** and **natural flow** are defined in the Dictionary.
- 2 The provisions in Division 2 of Part 8 partially mitigate alterations to natural flow regimes in the water sources.

- (c) reserve a portion of natural flows to maintain hydrological connectivity between the water sources and riparian zones, wetlands and floodplains connected to the water sources,

Note. The provisions in Division 2 of Part 8 contribute to maintaining the hydrological connectivity between the water sources and connected wetlands.

- (d) reserve a share of water to support environmental watering events in streams, riparian zones, floodplains and wetlands connected to the water sources,

Note. The rules in Division 1 and 2 of Part 10 of this Plan ensure that environmental water allowances are maintained.

- (e) contribute to critical environmental and water quality events in downstream water sources.

Notes.

- 1 The provisions in Division 2 of Part 8 contribute to maintaining the hydrological connectivity between the water sources and downstream water sources.
- 2 The EWA in Division 2 of Part 10 is to be used to mitigate water quality events in the Lower Darling Water Source.
- 3 The EWAs in Division 1 of Part 10 may be used in the Murray Water Source to provide connectivity between the water sources and downstream connected water sources.

- (4) The performance indicators used to measure the success of the strategies for reaching the
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broad environmental objective in subclause (1) is an evaluation of the extent to which the combined outcomes of the targeted objectives in subclause (2) have contributed to achieving the broad objective.

- (5) The performance indicators used to measure the success of the strategies for reaching the targeted environmental objectives in subclause (2) are the changes or trends in ecological condition during the term of this Plan as assessed using one or more of the following:
- (a) the recorded range, extent or condition of target ecological populations,
 - (b) measurements of carbon and nutrient transport pathways and fish movements through priority fish passage areas,
 - (c) the recorded values of water quality measurements including salinity, turbidity, total nitrogen, total phosphorous, pH, water temperature and dissolved oxygen,
 - (d) the magnitude, frequency, timing and water quality of environmental water events.
- (6) In evaluating the effectiveness of the strategies in meeting the objectives in this clause, the following will be relevant:
- (a) the extent to which the strategies in subclause (3) and provisions in this Plan have been implemented and complied with,
 - (b) the extent to which changes in the performance indicators can be attributed to the strategies and provisions in this Plan,
 - (c) the extent to which the strategies in subclause (3) support achievement of the environmental objectives,
 - (d) the extent to which external influences on the water sources during the term of this Plan have affected progress towards achieving the environmental objectives.
- Note.** External influences may include long and short-term climate trends, land use patterns, decisions made by the NSW Environmental Water Manager and other factors.

9 Economic objectives

- (1) The broad economic objective of this Plan is to maintain, and where possible improve, access to water to optimise economic benefits for agriculture, surface water-dependent industries and local economies.
- (2) The targeted economic objectives of this Plan are as follows:
- (a) to provide water trading opportunities for water-dependent businesses,
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Note. Trading is a generic term referring to dealings under Division 4 of Part 2 Chapter 3 of the Act.

- (b) to maintain, and where possible improve, access to water up to the long-term average sustainable diversion limit for agriculture, surface water-dependent businesses and landholders,
 - (c) to contribute to maintaining water quality within target ranges for agriculture, surface water-dependent businesses and landholders.
- (3) The strategies for reaching the targeted economic objectives of this Plan are as follows:
- (a) provide for trade of water allocations and share components subject to environmental and system constraints,

Note. The provisions in Part 9 permit a variety of dealings within environmental and system constraints, including assignment of rights under access licences and assignment of water allocations between access licences.
 - (b) to provide a stable and predictable framework for sharing water among water users,

Note. The available water determination provisions in Part 6 and priority of delivery rules in clause 69 provide certainty in how water will be shared between different categories of access licences.
 - (c) provide for flexibility of access to water,

Note. The water allocation account management rules in Part 8 provide flexibility that reflects the characteristics of the licence category.
 - (d) manage extractions to the long-term average annual extraction limit and the long-term average sustainable diversion limit, while recognising variability in climatic conditions in different years, including during drought,

Note. The application of the long-term average annual extraction limit and the long-term average sustainable diversion limit and the assessment and compliance provisions in Part 6 of this Plan manage extractions to different climatic conditions in different years.
 - (e) reserve a portion of natural flows to partially mitigate deterioration in water quality due to alterations to natural flow regimes.
- (4) The performance indicator used to measure the success of the strategies for reaching the broad economic objective in subclause (1) is an evaluation of the extent to which the combined outcomes of the targeted economic objectives in subclause (2) have contributed to achieving the broad objective.
- (5) The performance indicators used to measure the success of the strategies for reaching the targeted economic objectives in subclause (2) are the changes or trends in economic benefits

during the term of this Plan as assessed using one or more of the following:

- (a) the economic benefits of water extraction and use, including the movement of water to higher value uses,
 - (b) the economic benefits of water trading as demonstrated by the following:
 - (i) the annual number or volume of share components of access licences transferred or assigned,
 - (ii) the weighted average unit price of share components of access licences transferred or assigned,
Note. Weighted average unit price is defined in the Dictionary.
 - (iii) the annual volume of water allocations assigned,
 - (iv) the weighted average unit price of water allocations assigned,
 - (c) the recorded values of water quality measurements including salinity, sodium adsorption ratio, harmful algal blooms, total nitrogen, total phosphorus, pH, and dissolved oxygen.
- (6) In evaluating the effectiveness of the strategies in meeting the objectives of this clause, the following will be relevant:
- (a) the extent to which the strategies in subclause (3) and provisions in this Plan have been implemented and complied with,
 - (b) the extent to which the changes in the economic benefits of water extraction and use can be attributed to the strategies in subclause (3) and provisions in this Plan,
 - (c) the water made available during the term of this Plan through available water determinations and the granting of new licences,
 - (d) the extent to which external influences on surface water-dependent businesses during the term of this Plan have affected progress towards achieving the economic objectives.
Note. External influences may include trends in urban, agricultural and industrial development, energy costs, commodity prices, interest rates, technology advances and changes in industry policy or regulation.

10 Aboriginal cultural objectives

- (1) The broad Aboriginal cultural objective of this Plan is to maintain, and where possible improve, the spiritual, social, customary and economic values and uses of water by Aboriginal

people.

- (2) The targeted Aboriginal cultural objectives of this Plan are as follows:
- (a) to provide access to water in the exercise of native title rights,
 - (b) to provide access to water for Aboriginal cultural use, including fishing,
 - (c) to protect and, where possible enhance, identified water-dependent culturally significant areas, including important riparian vegetation communities,
 - (d) to maintain water quality within target ranges to ensure suitability of water for Aboriginal cultural use.
- (3) The strategies for reaching the Aboriginal cultural objectives of this Plan are as follows:
- (a) manage access to water consistent with the exercise of native title rights,
 - (b) provide for water associated with Aboriginal cultural values and uses,
Note. The rules in Part 7 provide opportunities for Aboriginal people to access water by allowing for the granting of an access licence of the subcategory 'Aboriginal cultural'.
 - (c) reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in the water sources,
Note: The provisions in Division 1 and 2 of Part 10 partially mitigate alterations to natural flow regimes.
 - (d) reserve a portion of natural flows to maintain longitudinal and lateral connectivity within and between water sources.
- (4) The performance indicator used to measure the success of the strategies for reaching the broad Aboriginal cultural objective in subclause (1) is an evaluation of the extent to which the combined outcomes of the targeted Aboriginal cultural objectives in subclause (2) have contributed to achieving the broad objective.
- (5) The performance indicators used to measure the success of the strategies for reaching the targeted Aboriginal cultural objectives in subclause (2) are the changes or trends in Aboriginal cultural benefits during the term of this Plan as assessed using one or more of the following:
- (a) the use of water by Aboriginal people by measuring factors including:
 - (i) the extent to which native title rights are able to be exercised, consistently with any determination of native title or indigenous land use agreement, and

- (ii) the extent to which access to water has contributed to achieving Aboriginal cultural outcomes,
 - (b) the recorded range or extent of target populations of native fish,
 - (c) the recorded range or condition of target populations of riparian vegetation,
 - (d) the recorded values of water quality measurements including salinity, harmful algal blooms, total nitrogen, total phosphorus, pH, water temperature and dissolved oxygen.
- (6) In evaluating the effectiveness of the strategies in meeting the objectives of this clause, the following will be relevant:
- (a) the extent to which the strategies in subclause (3) and provisions in this Plan have been implemented and complied with,
 - (b) the extent to which changes in the performance indicators can be attributed to the strategies in subclause (3) and provisions in this Plan,
 - (c) the extent to which the strategies in subclause (3) support achievement of the Aboriginal cultural objectives,
 - (d) the water made available for Aboriginal cultural values and uses during the term of this Plan through available water determinations and the granting of new access licences,
 - (e) the extent to which external influences on surface water-dependent Aboriginal cultural activities during the term of this Plan have affected progress towards achieving the Aboriginal cultural objectives.

Note. External influences may include trends in Aboriginal cultural activity, urban, agricultural and industrial development, climate or changes in policy or regulation.

11 Social and cultural objectives

- (1) The broad social and cultural objectives of this Plan are to provide access to surface water to support surface water-dependent social and cultural values.
 - (2) The targeted social and cultural objectives of this Plan are to maintain, and where possible improve, the following:
 - (a) access to water for basic landholder rights, town water supply and licensed domestic and stock purposes,
 - (b) access to water for surface water-dependent cultural, heritage and recreational uses, including recreational fishing,
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- (c) water quality within target ranges for basic landholder rights, town water supply, licensed domestic and stock purposes and surface water-dependent cultural, heritage and recreational uses, including recreational fishing.
- (3) The strategies for reaching the social and cultural objectives of this Plan are as follows:
- (a) provide water access for basic landholder rights, town water supply and for licensed domestic and stock purposes,
Note. The provisions for the maintenance of water supply in Part 10 of this Plan ensure that water is available for basic landholder rights, town water supply and licensed domestic and stock purposes.
 - (b) reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in the water sources,
 - (c) reserve a portion of natural flows to maintain longitudinal and lateral connectivity within and between water sources.
Note: The provisions in Division 2 of Part 8 and Divisions 1 and 2 of Part 10 contribute to maintaining the hydrological connectivity between the water sources and with downstream water sources.
- (4) The performance indicator used to measure the success of the strategies for reaching the broad social and cultural objective in subclause (1) is an evaluation of the extent to which the combined outcomes of the targeted social and cultural objectives in subclause (2) have contributed to achieving the broad objective.
- (5) The performance indicators used to measure the success of the strategies for reaching the targeted social and cultural objectives in subclause (2) are the changes or trends in social and cultural benefits during the term of this Plan as assessed using one or more of the following:
- (a) the social and cultural uses of water during the term of this Plan by measuring factors including:
 - (i) the extent to which basic landholder rights and licensed domestic and stock requirements have been met, and
 - (ii) the extent to which major utility and local utility access licence requirements have been met,
 - (b) the recorded range or extent of target populations of native fish that are important for recreational fishing,

- (c) the recorded takes of native fish that are important for recreational fishing within legal age and size classes,
 - (d) the recorded values of water quality measurements including salinity, harmful algal blooms, total nitrogen, total phosphorus, pH, water temperature and dissolved oxygen.
- (6) In evaluating the effectiveness of the strategies in meeting the objectives of this clause, the following will be relevant:
- (a) the extent to which the strategies in subclause (3) and provisions in this Plan have been implemented and complied with,
 - (b) the extent to which the changes in the performance indicators can be attributed to the strategies in subclause (3) and provisions in this Plan,
 - (c) the extent to which the strategies in subclause (3) support achievement of the social and cultural objectives,
 - (d) the water made available during the term of this Plan through available water determinations and the granting of new licences,
 - (e) the extent to which external influences on surface water-dependent social and cultural activities during the term of this Plan have affected progress towards achieving the social and cultural objectives.

Note. External influences may include trends in urban, agricultural and industrial development, social or cultural behaviour, climate or changes in policy or regulation.

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, having regard to the following:
 - (a) the environmental water provisions established under Part 4,
 - (b) the requirements for water to satisfy basic landholder rights identified under Part 5,
 - (c) the requirements for water for extraction under access licences identified under Part 5,
 - (d) the access licence dealing rules established under Part 9.
- (2) The bulk access regime:
 - (a) establishes rules according to which:
 - (i) access licences are to be granted as provided for in Part 7,
 - (ii) available water determinations are to be made as provided for in Part 6,
 - (iii) access licences are to be managed as provided for in Part 8,
 - (b) 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 extraction above the long-term average annual extraction limit or the long-term average sustainable diversion limit contained in Part 6, and
 - (c) recognises and is consistent with the following:
 - (i) the limits to the availability of water as provided for in Part 6,
 - (ii) the water management principles set out in section 5 of the Act,
 - (iii) the effect of climatic variability on the availability of water as described in clause 13, and
 - (d) contains provisions with respect to the mandatory conditions imposed on access licences in Part 11.

13 Climatic variability

This Plan recognises the effects of climatic variability on river flow in the water sources through provisions contained in Part 6 that:

- (a) manage the sharing of water within the limits of water availability on a long-term basis, and
- (b) establish 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 extraction against the long-term average annual extraction limit or the long-term average sustainable diversion limit, and
- (c) manage the sharing of water between categories of access licences on an annual basis through available water determinations.

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 Environmental water provisions

Note. This Part is made in accordance with section 8 of the Act.

14 General

This Part contains environmental water provisions that commit, identify, establish and maintain planned environmental water.

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 by reference to the following:

- (a) the physical presence of water in the water sources,
- (b) the long-term average annual commitment of water as planned environmental water.

16 Establishment and maintenance of planned environmental water

(1) Planned environmental water is established in the water sources as follows:

- (a) the physical presence of water resulting from the following:
 - (i) the environmental water rules in the Murray Water Source specified in Division 1 of Part 10,

Note. The provisions in Division 1 of Part 10 establish environmental water allowances which can be used to make releases for environmental purposes in the Murray Water Source.

- (ii) the environmental water rules in the Lower Darling Water Source specified in Division 2 of Part 10,

Note. The provisions in Division 2 of Part 10 establish an environmental water allowance which can be used to make releases for water quality purposes in the Lower Darling Water Source.

- (iii) the limitations on access to flows for supplementary water access licences specified in Division 2 of Part 8,

- (b) the long-term average annual commitment of water as planned environmental water, resulting from compliance with the long-term average annual extraction limit and the long-term average sustainable diversion limit in Part 6.

(2) The planned environmental water established under subclause (1) (a) is maintained by:

- (a) the environmental water rules specified in Division 1 and 2 of Part 10,
 - (b) the limitations on access to flows for supplementary water access licences in Division 2 of Part 8.
- (3) The planned environmental water established under subclause (1) (b) is maintained by the rules specified in Part 6.

Note. The rules in Part 6 of this Plan ensure that there will be water remaining in the water sources over the long term by maintaining compliance with the long-term average annual extraction limit and the long-term average sustainable diversion limit. The provisions in Part 6 also provide for reduced available water determinations when either of the limits has been assessed to have been exceeded.

Part 5 Requirements for water

Division 1 General

17 Application

- (1) This Part identifies the requirements for water for basic landholder rights and for extraction under access licences in the water sources.
- (2) The volumes of water specified in this Part represent the estimated requirements for water to satisfy basic landholder rights and the total volumes or unit shares specified in the share components of all access licences on the commencement of this Plan.
- (3) This Plan recognises that requirements for water for basic landholder rights and the total share components of all access licences may change during the term of this Plan.

Notes.

- 1 The total share components of access licences in the water sources may change during the term of this Plan as a result of:
 - (a) the grant, surrender or cancellation of access licences in the water sources, or
 - (b) the variation of local water utility access licences under section 66 of the Act.
- 2 Basic landholder rights requirements may increase as provided for under the Act. This Plan manages changes in basic landholder rights and total share components of all access licences through provisions in Part 6 which manage the sharing of water within the limits of water availability.
- 3 Inherent water quality and land use activities may make the water in some areas unsuitable for human consumption. Water should not be consumed, or otherwise used, without first being tested and, if necessary, appropriately treated to ensure it is fit for purpose. Testing and treatment is the responsibility of the water user.

Division 2 Requirements for water for basic landholder rights

Note. Under the Act, basic landholder rights are defined as domestic and stock rights, native title rights and harvestable rights. There are no harvestable rights in the water sources.

18 Domestic and stock rights

On the commencement of this Plan, the water requirements of persons entitled to domestic and stock rights are estimated to total:

- (a) 1,936 megalitres per year (*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 section 52 of the Act and must be exercised in accordance with any mandatory guidelines established under the Act for the taking and use of
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water for domestic consumption or stock watering.

- 2 Under section 331 of the Act, the Minister may direct the holder of a domestic and stock right to take specified measures to protect the environment, to preserve basic landholder rights or to overcome a threat to public health.
- 3 The volumes set out in this clause are separate from any volumes of water that may be taken under an access licence for domestic and stock purposes.

19 Native title rights

The requirement for water to satisfy native title rights is the water that may be taken in the exercise of native title rights in accordance with the *Native Title Act 1993* of the Commonwealth, including:

- (a) the native title determination for the Barkandji Traditional Owners #8 (Parts A and B, National Native Title Tribunal references NCD2015/001 and NCD2017/00),
- (b) any other determination of native title,
- (c) any relevant indigenous land use agreement.

Notes.

- 1 A map of the native title determination area can be viewed by searching the National Native Title Tribunal website at www.nntt.gov.au.
- 2 This Plan may be amended if there is an additional or change to a native title determination in accordance with the *Native Title Act 1993* of the Commonwealth by which water is required.
- 3 This Plan may be amended if consultation with native title holders identifies more specific requirements for water to satisfy native title rights.
- 4 Native title rights may be exercised in accordance with the *Native Title Act 1993* of the Commonwealth, including section 211 of that Act.

Division 3 Requirements for water under access licences

Notes.

- 1 The share components in this Division include licensed environmental water as defined in section 8 of the Act. The Environmental Water Register maintained by the Department provides a record of licensed environmental water, as well as other water intended to be used for environmental purposes.
- 2 As at 1 July 2020, the licensed environmental water referred to in Note 1 comprises:
 - (a) two access licences with adaptive environmental water conditions totalling 32,027 unit shares in the Murray Water Source, and
 - (b) no access licences with adaptive environmental water conditions in the Lower Darling Water Source.
- 3 As at 1 July 2020, there are:
 - (a) 36 other access licences with share components totalling 626,317.53 unit shares in the Murray Water Source, and
 - (b) 8 other access licences with share components totalling 301,038 unit shares in the Lower Darling Water Source,

that are not identified as licensed environmental water but are intended to be used for environmental purposes and are also included in this Division. Some of these are held by the Commonwealth Government

and others by the NSW Government. These access licences are regulated river (general security) access licences, regulated river (high security) access licences and supplementary water access licences.

- 4 This Division sets out the total volumes or unit shares in the share components of access licences in the water sources as at 1 July 2020. The actual volume of water available at any time will depend on climate, access licence priority and the provisions in this Plan.

20 Share components of domestic and stock access licences

On the commencement of this Plan, it is estimated that the share components of domestic and stock access licences total:

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

21 Share components of local water utility access licences

On the commencement of this Plan, it is estimated that the share components of local water utility access licences total:

- (a) 38,217 ML/year in the Murray Water Source, and
- (b) 10,135 ML/year in the Lower Darling Water Source.

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

- (1) On the commencement of this Plan, it is estimated that the total share components of access licences that are a subcategory of regulated river (high security) access licence in the Murray Water Source are as follows:

- (a) 0 ML per year for subcategory Aboriginal cultural,
- (b) 47 ML per year for subcategory Community and education,
- (c) 0 ML per year for subcategory Environmental,
- (d) 1 ML per year for subcategory Research,
- (e) 3,195 ML per year for subcategory Town water supply.

- (2) On the commencement of this Plan, it is estimated that the share components of regulated river (high security) access licences other than those specified in subclause (1) total:

- (a) 190,222 unit shares in the Murray Water Source, and
- (b) 7,633 unit shares in the Lower Darling Water Source.

23 Share components of regulated river (conveyance) access licences

On the commencement of this Plan, it is estimated that the share components of regulated river (conveyance) access licences total:

- (a) 330,000 unit shares in the Murray Water Source, and
- (b) 0 unit shares in the Lower Darling Water Source.

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

On the commencement of this Plan, it is estimated that the share components of regulated river (general security) access licences total:

- (a) 1,674,096 unit shares in the Murray Water Source,
- (b) 79,507 unit shares in the Lower Darling Water Source.

25 Share components of supplementary water access licences

On the commencement of this Plan, it is estimated that the share components of supplementary water access licences total:

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

Part 6 Limits to the availability of water

Note. This Part sets out the rules for managing the availability of water for extraction in accordance with the following long-term limits on extraction:

- (a) a long-term average annual extraction limit, and
- (b) a long-term average sustainable diversion limit.

Division 1 Calculations under this Part

26 Exclusions, inclusions and variations in calculations

- (1) This clause applies to the calculation of the following:
 - (a) the long-term average annual extraction limit under clause 27,
 - (b) the average annual extraction under clause 28,
 - (c) the annual permitted take under clause 31,
 - (d) the annual actual take under clause 31.

Note. *Annual permitted take* and *annual actual take* are defined in the Dictionary.
- (2) The calculation by the Minister to which this clause applies must:
 - (a) exclude the following:
 - (i) allocations assigned from an access licence in the relevant water source to an access licence in another water source under section 71T of the Act,
 - (ii) environmental water flows provided for in Part 10,
 - (iii) in relation to average annual extraction under clause 28 only, water committed as licensed environmental water under section 8F of the Act, and
 - (b) include allocations assigned to an access licence in the relevant water source from an access licence in another water source under section 71T of the Act.
- (3) The calculation by the Minister of the long-term average annual extraction limit under clause 27 must be adjusted by a volume that appropriately reflects the following:
 - (a) the share components of water access licences in the relevant water source that are subject to a dealing under section 71U of the Act,
 - (b) any change to the amount of water committed as licensed environmental water under section 8F of the Act.

Division 2 Long-term average annual extraction limit

27 Calculation of the long-term average annual extraction limit

- (1) Following the end of each water year, the Minister must calculate the long-term average annual extraction limit for the water sources in accordance with this clause and clause 26.
 - (2) The long-term average annual extraction limit for the Murray Water Source is the lesser of the following, minus 17,800 ML/year:
 - (a) average annual extraction from the Murray Water Source calculated based on the following:
 - (i) the water storages and water use development that existed in the 2000/2001 water year,
 - (ii) the basic landholder rights and access licence share components that existed on 1 July 2004,
 - (iii) the level of development for plantation forestry that existed on 30 June 2009,
 - (iv) the rules in the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003* as at 1 July 2004,
 - (b) average annual extraction from the Murray Water Source calculated under Cap baseline conditions as agreed under the Murray-Darling Basin Agreement that was in place at the commencement of the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003*.
- Note.** The 17,800 ML/year subtracted under subclause (2) is the estimated long-term extraction associated with the 100,000 unit shares of supplementary water access licence purchased under the Living Murray Program. The taking of water under this licence will not be accounted for against the long-term average annual extraction limit.
- (3) The long-term average annual extraction limit for the Lower Darling Water Source is the lesser of the following, minus 35,500 ML/year:
 - (a) average annual extraction from the Lower Darling Water Source calculated based on the following:
 - (i) the water storages and water use development that existed in the 2000/2001 water year,

- (ii) the basic landholder rights and access licence share components that existed on 1 July 2004 plus 47,800 unit shares,
 - (iii) the level of development for plantation forestry that existed on 30 June 2009,
 - (iv) the rules in the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003* as at 1 July 2004,
- (b) average annual extraction calculated under Cap baseline conditions as agreed under the Murray-Darling Basin Agreement that was in place at the commencement of the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003*.
- (4) For the purposes of subclause (2) and (3) average annual extraction for each water source is to be calculated over the duration of available climate records using the hydrological computer model approved by the Minister.

Notes.

- 1 The 47,800 unit shares specified in subclause (3) (a) were issued after July 2004 as part of the arrangements that replaced the replenishment flow provisions for the Great Darling Anabranch.
- 2 The 35,500 ML/year subtracted under subclause (3) is the estimated long-term extraction associated with the 250,000 unit shares of supplementary water access licence purchased under the Living Murray Program. The taking of water under this licence will not be accounted for against the long-term average annual extraction limit.
- 3 Under section 8F of the Act the long-term average annual extraction limit is to be varied by any change to licensed environmental water, excluding water committed under section 8C of the Act.
- 4 The long-term average annual extraction limit recognises the effect of climatic variability on the availability of water, in accordance with section 20 (2) (c) of the Act as historic climate and river flow information is used in its determination.
- 5 ***Murray-Darling Basin Agreement, plantation forestry, water storage and water use development*** are defined in the Dictionary.

28 Calculation of average annual extraction

- (1) The Minister, using the hydrological computer model approved by the Minister, is to calculate the average annual extraction for each water source following the end of each water year, calculated over the duration of available climate records and based on the following:
- (a) the water storages and water use development that existed in that water year,
 - (b) the basic landholder rights and access licence share components that existed in that water year,
 - (c) the current rules in this Plan,

- (d) the level of development for plantation forestry in that water year.
- (2) The calculations made under subclause (1) must not include average annual extractions under:
 - (a) the 100,000 unit shares of supplementary water access licence purchased under the Living Murray Program in the Murray Water Source,
 - (b) the 250,000 unit shares of supplementary water access licence purchased under the Living Murray Program in the Lower Darling Water Source.

29 Assessment of compliance with the long-term average annual extraction limit

- (1) Following the calculations under clauses 27 and 28, the Minister is to compare average annual extraction against the long-term average annual extraction limit for each water source.
- (2) There is non-compliance with the long-term average annual extraction limit for the Murray Water Source if average annual extraction from the water source exceeds the long-term average annual extraction limit by any of the following:
 - (i) 3% or more,
 - (ii) more than half the difference between the average annual extraction calculated under clause 27 (2) (a) and (b),
 - (iii) the amount calculated under clause 27 (2) (b).
- (3) There is non-compliance with the long-term average annual extraction limit for the Lower Darling Water Source if average annual extraction from the water source exceeds the long-term average annual extraction limit by any of the following:
 - (i) 3% or more,
 - (ii) more than half the difference between the average annual extraction calculated under clause 27 (3) (a) and (b),
 - (iii) the amount calculated under clause 27 (3) (b).

Division 3 Long-term average sustainable diversion limit

30 Calculation of the long-term average sustainable diversion limit

- (1) Subject to any variation in accordance with subclause (3), the long-term average sustainable diversion limit for the Murray Water Source is:
-

- (a) the component of the baseline diversion limit for the New South Wales Murray surface water SDL resource unit as determined under Schedule 3 of the Basin Plan, that in the Minister's opinion is attributable to the Murray Water Source, minus
 - (b) 262,000 ML/year, minus
 - (c) the New South Wales Murray surface water SDL resource unit shared reduction amount as determined under section 6.05 of the Basin Plan.
- (2) Subject to any variation in accordance with subclause (3), the long-term average sustainable diversion limit for the Lower Darling Water Source is:
- (a) the component of the baseline diversion limit for the Lower Darling surface water SDL resource unit as determined under Schedule 3 of the Basin Plan, that in the Minister's opinion is attributable to the Lower Darling Water Source, minus
 - (b) 8,000 ML/year, minus
 - (c) the Lower Darling surface water SDL resource unit shared reduction amount as determined under section 6.05 of the Basin Plan.
- (3) The long-term average sustainable diversion limit is to be varied as determined under Chapter 7 of the Basin Plan.

Notes.

- 1 **Baseline diversion limit** and **SDL resource unit shared reduction amount** are defined in the Dictionary.
- 2 The long-term average sustainable diversion limit for the New South Wales Murray surface water SDL resource unit specified in Schedule 2 of the Basin Plan covers extractions from both the New South Wales Murray Regulated River Water Source and the Murray Unregulated River Water Sources.
- 3 The long-term average sustainable diversion limit for the Lower Darling surface water SDL resource unit specified in Schedule 2 of the Basin Plan covers extractions from both the New South Wales Lower Darling Regulated River Water Source and the Lower Murray-Darling Unregulated Water Source.
- 4 The subtraction of 262,000 ML/year and 8,000 ML/year are prescribed in Schedule 2 of the Basin Plan.

31 Calculation of annual permitted take and annual actual take for the water year

- (1) Following the end of each water year, the Minister is to calculate the annual permitted take and annual actual take of water for each water source for the previous water year in accordance with Division 2 of Part 4 of Chapter 6 of the Basin Plan.

- (2) For the purposes of the calculation, references to the SDL resource unit in Division 2 of Part 4 of Chapter 6 of the Basin Plan are taken to be references to the respective water source.

Notes.

- 1 **Annual actual take** and **annual permitted take** are defined in the Dictionary. Take of licensed environmental water and under licences held by the Commonwealth Environmental Water Holder are not included in the calculation of annual permitted take and annual actual take as they fall outside the definition of take for consumptive use.
- 2 **Take** and **consumptive use** are defined in section 4 of the *Water Act 2007* of the Commonwealth.

32 Assessment of compliance with the long-term average sustainable diversion limit

- (1) Following the calculation under clause 31 after the end of each water year, the Minister is to undertake an assessment of compliance with the long-term average sustainable diversion limit in accordance with the requirements of Division 2 of Part 4 of Chapter 6 of the Basin Plan.
- (2) There is non-compliance with the long-term average sustainable diversion limit in the circumstances set out in Division 2 of Part 4 of Chapter 6 of the Basin Plan.

Division 4 Compliance with extraction and diversion limits

33 Action following non-compliance

- (1) For the Murray Water Source, if an assessment under clauses 29 or 32 demonstrates that there is non-compliance with either the long-term average annual extraction limit or the long-term average sustainable diversion limit, the Minister is to take one or more of the following actions:
- (a) make future available water determinations for supplementary water access licences of less than 1 ML per unit share,
- (b) in relation to available water determinations for regulated river (general security) access licences, reduce the limit under clause 34 (3).

Notes.

- 1 Action under this clause will have effect from the water year following the assessment, which will be two water years after the non-compliance occurred.
- 2 **ML** is defined in the Dictionary.
- (2) For the Lower Darling Water Source, if an assessment under clauses 29 or 32 demonstrates that there is non-compliance with either the long-term average annual extraction limit or the long-term average sustainable diversion limit, the Minister is to take any one or more of the following actions for the water year after the assessment:

- (a) make future available water determinations for supplementary water access licences of less than 1 ML per unit share,
- (b) in relation to available water determinations for regulated river (general security) access licences, reduce the limit under clause 34 (3).

Note. Action under this clause will have effect from the water year following the assessment, which will be two water years after the non-compliance occurred.

- (3) The Minister may take one or more of the actions specified in subclause (1) (a) and (1) (b), or (2) (a) and (2) (b), if an assessment under clause 31 for the respective water source would have demonstrated non-compliance with the long-term average sustainable diversion limit but for there being a reasonable excuse, as provided for in Division 2 of Part 4 of Chapter 6 of the Basin Plan.
- (4) An action under subclause (1), (2) or (3) is to be taken to the extent to which, and only for as long as, the Minister considers the following is necessary:
 - (a) in the case of non-compliance with the long-term average annual extraction limit — to return long-term average annual extraction in the respective water source to the long-term average annual extraction limit, or
 - (b) in the case of non-compliance with the long-term average sustainable diversion limit — to meet the requirements of Division 2 of Part 4 of Chapter 6 of the Basin Plan,
 - (c) in the case where non-compliance with the long-term average sustainable diversion limit would have occurred but for there being a reasonable excuse — to meet the requirements of Division 2 of Part 4 of Chapter 6 of the Basin Plan.
- (5) The Minister must not take action under subclause (1), (2) or (3) to reduce the limit to the sum of available water determinations that may be made for regulated river (general security) access licences unless the Minister has made an available water determination for supplementary water access licences of zero in the respective water source.
- (6) Before taking action under this clause, the Minister may consult with water user representatives on the following:
 - (a) the data used for the calculations under Divisions 2 and 3, and
 - (b) the proposed actions under this Division.

Division 5 Available water determinations

34 General

- (1) Available water determinations for access licences are to be expressed as one of the following:
 - (a) with respect to access licences specifying share components in ML/year— a percentage of the share component,
 - (b) with respect to access licences specifying share components as a number of unit shares— ML per unit share.
- (2) The sum of available water determinations made for any access licence, other than regulated river (general security) access licences in the Murray Water Source, must not exceed the following in any water year:
 - (a) for any access licence where share components are specified as ML/year— 100% of the share component,
 - (b) for any access licence specifying the share component as a number of unit shares— 1 ML per unit share of the share component, unless a lower amount is determined under clause 33.
- (3) The sum of available water determinations made for regulated river (general security) access licences in the Murray Water Source must not exceed 1.1 ML per unit share of the access licence share component in any water year, unless a lower amount is determined under clause 33.

35 Available water determinations for domestic and stock access licences

Unless the Minister otherwise determines, at the commencement of each water year an available water determination of 100% of the access licence share component is to be made for domestic and stock access licences.

36 Available water determinations for local water utility access licences

Unless the Minister otherwise determines, at the commencement of each water year an available water determination of 100% of the access licence share component is to be made for local water utility access licences.

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

- (1) Unless the Minister otherwise determines, at the commencement of each water year an available water determination of 100% of the access licence share component is to be made 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.
- (2) Unless the Minister otherwise determines and subject to subclause (4), at the commencement of each water year an available water determination is to be made for regulated river (high security) access licences other than those specified in subclause (1) in the Murray Water Source, of:
 - (a) 0.97 ML per unit share, whenever the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source is less than 0.97 ML per unit share, or
 - (b) 1 ML per unit share, whenever the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source is equal to or greater than 0.97 ML per unit share.
- (3) Unless the Minister otherwise determines and subject to subclause (4), at the commencement of each water year an available water determination of 1 ML per unit share is to be made for regulated river (high security) access licences in the Lower Darling Water Source.
- (4) The Minister must not make an available water determination under subclause (1), (2) or (3) unless sufficient water is available for all of the following:
 - (a) to meet the environmental water rules in Divisions 1 and 2 of Part 10 that are relevant to the respective water source,
 - (b) to meet the requirements for basic landholder rights in the respective water source,

- (c) to make available water determinations totalling 100% of access licence share components for both domestic and stock access licences and local water utility access licences in the respective water source and those subcategories of regulated river (high security) access licences specified in subclause (1) in the Murray Water Source,
- (d) to provide for existing water allocations in regulated river (general security) access licence water allocation accounts in the respective water source,
- (b) to account for water losses associated with holding and delivering the water:
 - (i) to be made available as a result of the available water determination made under subclauses (1) – (3), and
 - (ii) referred to in paragraphs (a) – (d) above.

38 Available water determinations for regulated river (conveyance) access licences

- (1) Unless the Minister otherwise determines and subject to subclause (2), available water determinations for regulated river (conveyance) access licences in the Murray Water Source are to be made so that the sum of those available water determinations in the water year total the following:
 - (a) 0.5 ML per unit share, when the sum of available water determinations in the Murray Water Source for regulated river (high security) access licences with share components expressed in unit shares is 0.97 ML per unit share, and for regulated river (general security) access licences is 0 ML per unit share,
 - (b) 0.5 ML per unit share plus 0.003883 ML per unit share for each 0.01 ML per unit share 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 per unit share, when the sum of available water determinations for regulated river (general security) access licences for the water year is less than 0.6 ML per unit share,
 - (c) 0.733 ML per unit share plus 0.006675 ML per unit share for each 0.01 ML per unit share 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 per unit share, 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 per unit share but less than 1 ML per unit share,

- (d) 1 ML per unit share, when the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source for the water year is equal to or greater than 1 ML per unit share.
- (2) The Minister must not make an available water determination under subclause (1) unless sufficient water is available for the following:
- (a) to meet the environmental water rules in Divisions 1 and 2 of Part 10 that are relevant to the Murray Water Source,
 - (b) to meet the requirements for basic landholder rights in the Murray Water Source,
 - (c) to make available water determinations totalling 100% of access licence share components for domestic and stock access licences, local water utility access licences and subcategories of regulated river (high security) access licences that have share components expressed in ML/year, in the Murray Water Source,
 - (d) to make available water determinations totalling 0.97 ML per share for regulated river (high security) access licences with share components expressed in unit shares in the Murray Water Source,
 - (e) to provide for existing water allocations in regulated river (conveyance) access licence water allocation accounts in the Murray Water Source,
 - (f) to provide for existing water allocations in regulated river (general security) access licence water allocation accounts in the Murray Water Source,
 - (g) to account for water losses associated with holding and delivering the water:
 - (i) to be made available as a result of the available water determination made under subclause (1), and,
 - (ii) referred to in paragraphs (a) to (f) above.

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

- (1) The Minister is to assess, at least monthly, if water is available for the making of an available water determination for regulated river (general security) access licences.

- (2) For the purposes of the assessment, water is not available in the Murray Water Source unless sufficient water is available for the following:
- (a) to meet the environmental water rules in Divisions 1 and 2 of Part 10 that are relevant to the Murray Water Source,
 - (b) to meet the requirements for basic landholder rights in the Murray Water Source,
 - (c) to make available water determinations totalling 100% of access licence share components for domestic and stock access licences, local water utility access licences and subcategories of regulated river (high security) access licences that have share components expressed in ML/year, in the Murray Water Source,
 - (d) to make available water determinations totalling 0.97 ML per share for regulated river (high security) access licences with share components expressed in unit shares in the Murray Water Source,
 - (e) to make available water determinations totalling 0.5 ML per unit share for regulated river (conveyance) access licences in the Murray Water Source,
 - (f) to provide for existing water allocations in regulated river (general security) access licence water allocation accounts in the Murray Water Source,
 - (g) to account for water losses associated with holding and delivering the water:
 - (i) to be made available as a result of the available water determination made under subclause (1), and
 - (ii) referred to in paragraphs (a) to (f) above.
- (3) For the purposes of the assessment, water is not available in the Lower Darling Water Source unless sufficient water is available for the following:
- (a) to meet the environmental water rules in Divisions 1 and 2 of Part 10 that are relevant to the Lower Darling Water Source,
 - (b) to meet the requirements for basic landholder rights in the Lower Darling Water Source,
 - (c) to make available water determinations totalling 100% of access licence share components for domestic and stock access licences and local water utility access licences in the Lower Darling Water Source,

- (d) to make available water determinations totalling 1 ML per share for regulated river (high security) access licences in the Lower Darling Water Source,
 - (f) to provide for existing water allocations in regulated river (general security) access licence water allocation accounts in the Lower Darling Water Source,
 - (g) to account for water losses associated with holding and delivering the water:
 - (i) to be made available as a result of the available water determination made under subclause (1), and
 - (ii) referred to in paragraphs (a) to (f) above.
- (4) For the purpose of the assessment of available water for regulated river (general security) access licences in the Murray Water Source, water in storage in the Lower Darling Water Source is not to be considered until the sum of available water determinations for regulated river (general security) access licences in the Lower Darling Water Source in the water year is 1 ML per unit share.
- (5) If the Minister assesses that water is available under this clause, the Minister is to consider making an available water determination for regulated river (general security) access licences in the respective water source, subject to subclause (6).
- (6) If the Minister assesses under subclause (2) that water is available for regulated river (general security) access licences in the Murray Water Source and the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source equals:
- (a) 0.3 ML per unit share, or
 - (b) 0.5 ML per unit share and exceptional circumstances as defined in clause 54 apply,
- then the Minister must not make any further available water determinations for regulated river (general security) access licences in the Murray Water Source until all water taken from the Barmah-Millewa Allowance under clause 57 (2) has been re-credited to the Allowance under clause 56 (2).

40 Available water determinations for supplementary water access licences

At the commencement of each water year, the Minister is to make available water determinations for supplementary water access licences in the respective water sources of 1 ML per unit share, unless a lower amount is determined under clause 33.

Note. The taking of water under a supplementary water access licence is subject to Division 2 of Part 8.

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Part 7 Rules for granting access licences

Notes.

- 1 This Part is made in accordance with sections 61 and 63 of the Act. Section 61 of the Act provides for applications for specific purpose access licences in accordance with the regulations and the relevant water sharing plan.
- 2 Access licences in the water sources are granted subject to mandatory conditions required to be imposed by this Plan, the regulations and the Act, and may also be subject to discretionary conditions.

41 Specific purpose access licences

- (1) The Minister must not grant a specific purpose access licence unless satisfied that the share and extraction components of the access licence are the minimum required for the proposed use.
- (2) A person may make an application for a regulated river (high security) (Aboriginal cultural) access licence only if the share component of the proposed access licence is no greater than 10 ML/year.
- (3) The Minister may only grant a regulated river (high security) (Aboriginal cultural) access licence 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 8 Operation of water allocation accounts and managing access licences

Notes.

- 1 Section 85 of the Act and the regulations provide for the keeping of water allocation accounts for access licences. The rules in this Part restrict the water that may be taken under, or assigned from, an access licence over a specified period of time, and the unused water allocations in water allocation accounts that may be carried over from one water year to the next. These restrictions are in addition to any other limits on access licences for the taking or assignment of water. It is an offence under section 60C of the Act to take water under an access licence for which there is no or insufficient water allocation.
- 2 The provisions in this Part apply to the following persons:
 - (a) the Minister in managing water allocation accounts,
 - (b) the access licence holder, as required by mandatory conditions imposed on the access licence under Part 11.

Division 1 General water allocation account management rules

42 Credits to and debits from an individual water allocation account

- (1) For any access licence other than a supplementary water access licence, the Minister must debit, from the water allocation account for that access licence, the volume of water extracted by the water supply works nominated by the access licence, except where subclauses (2), (4), and (5), or clause 45 apply.
- (2) For any access licence other than a supplementary water access licence, if the Minister has first given written notice to the holder of the licence in accordance with a water order debiting protocol established by the Minister, the Minister must debit the greater of the following from the water allocation account for that access licence, except where clause 45 applies:
 - (a) the volume of water extracted by water supply works nominated by the access licence,
 - (b) the water ordered for extraction under the access licence.

Note. It is intended that the Minister may take action under subclause (2) if water orders from a particular licence holder exceed the volume of water taken under the licence and this cannot be explained by rainfall or other unavoidable factors.
- (3) For any supplementary water access licence, the Minister must, in accordance with any applicable supplementary water announcement, debit the volume of water extracted by the water supply works nominated by the access licence from the water allocation account for that access licence.

(4) When water is ordered in accordance with the Environmental Flow Reuse Procedures for the water sources, the amount of water ordered will be debited from the water allocation account for the access licence.

(5) When water is ordered in accordance with the Piggybacking Procedures for the water sources, the amount of water ordered will be debited from the water allocation account for the access licence, as varied in accordance with any debiting protocol established by the Minister.

Note. A protocol may be developed to increase or decrease the amount of water to be debited, to offset any impact on reliability to other licence holders caused by the release of water under the Piggybacking Procedures.

(6) For any regulated river (general security) access licence in the Murray Water Source, the total water allocation credited to the water allocation account from available water determinations during the water year must not exceed 1.1 ML per unit share minus the volume carried over from the previous water year.

(7) For any regulated river (general security) access licence in the Lower Darling Water Source, the total water allocation credited to the water allocation account from available water determinations during the water year must not exceed the greater of:

(a) 0.5 ML per unit share, and

(b) 1 ML per unit share minus the water allocations carried over from the previous water year.

43 Limits on water allocation accounts and carryover

(1) Water allocations remaining in a water allocation account must not be carried over from one water year to the next water year for the following categories of licences:

(a) domestic and stock access licence,

(b) local water utility access licence,

(c) regulated river (high security) access licence,

(d) regulated river (conveyance) access licence,

(e) supplementary water access licence.

(2) Water allocations remaining in the water allocation account must be carried over from one water year to the next water year for the following licences:

- (a) regulated river (general security) access licences in the Murray Water Source, up to a limit of 0.5 ML per unit share,
- (b) regulated river (general security) access licences in the Lower Darling Water Source, up to a limit of 0.5 ML per unit share plus the storage volume of on-farm storages supplied by works nominated on the access licence less the volume of water contained in the respective on-farm storages at the end of the water year.

44 Withdrawals from water allocation accounts for evaporation and dam spills

- (1) In relation to each regulated river (general security) access licence water allocation account in the Lower Darling Water Source, the Minister is to withdraw an amount that reflects the water lost to evaporation due to the additional surface area in the Menindee Lakes generated by water carried over under clause 43 (2) (b), over an assessment period determined by the Minister.
- (2) The amount the Minister is to withdraw under subclause (1) from each water allocation account is the lesser of the following:
 - (a) the volume in the account at the commencement of the assessment period that exceeds:
 - (i) the water credited to the water allocation account from available water determinations in that water year,
 - (ii) plus the water allocations assigned to the water allocation account from another water allocation account in that water year,
 - (iii) minus the water allocations assigned from the water allocation account to another water allocation account in that water year,
 - (b) the volume calculated under paragraph (a) divided by the total volume for all regulated river (general security) access licences calculated under paragraph (a) in the Lower Darling Water Source, multiplied by the depth of evaporation from the Menindee Lakes over the assessment period multiplied by the additional surface area of water in the Menindee Lakes resulting from the total excess volume calculated under paragraph (a).

- (3) In relation to each regulated river (general security) access licence water allocation account in the Lower Darling Water Source, the Minister is to withdraw an amount for water spills from the Menindee Lakes, over an assessment period determined by the Minister.
- (4) The amount the Minister is to withdraw under subclause (3) from each water allocation account is the lesser of the following:
- (a) the volume in the account at the commencement of the assessment period that exceeds:
 - (i) the water credited to the water allocation account from available water determinations in that water year,
 - (ii) plus the water allocations assigned to the water allocation account from another water allocation account in that water year,
 - (iii) minus the water allocations assigned from the water allocation account to another water allocation account in that water year,
 - (b) the volume calculated under paragraph (a) divided by the total volume for all regulated river (general security) access licences calculated under paragraph (a) in the Lower Darling Water Source, multiplied by the total volume of water spilled from the Menindee Lakes during the assessment period.

45 Taking of uncontrolled flows

Notes.

1 This clause is made under section 85A of the Act.

2 **Uncontrolled flows** are defined in the Dictionary.

- (1) The Minister may, by order published on the Department's website, authorise the holders of regulated river (general security) access licences in either of the water sources to take water from uncontrolled flows, that have not been credited to the water allocation accounts of those licences, whenever:
- (a) the sum of available water determinations for regulated river (general security) access licences in the respective water source is less than or equal to 0.6 ML per unit share, and
 - (b) the taking of water under supplementary water access licences is permitted in the same segment of the respective water source as the water supply works nominated on the regulated river (general security) access licence.

- (2) The total amount of water permitted to be taken under subclause (1) is 1 ML per unit share minus the water allocations carried over from the previous water year and the water credited to the water allocation account from available water determinations in that water year.
- (3) If at any time during the water year the amount of water taken under subclause (1) exceeds the amount permitted to be taken under subclause (2), including due to an increase in the sum of available water determinations made in the water year, then the amount of water in excess of that permitted to be taken must be debited from the water allocation account.

Division 2 Supplementary water events

Notes.

- 1 This Division is made under section 70 of the Act.
- 2 **Supplementary water event** is defined in the Dictionary.

46 Taking of water under supplementary water access licences

The holder of a supplementary water access licence may only take water in accordance with supplementary water event announcements made by the Minister that are relevant to that licence.

47 Announcement of supplementary water event

- (1) The Minister may announce a supplementary water event if, in the Minister's opinion, there will be uncontrolled flows in the segment of the water source to which the announcement applies.
- (2) The Minister must not announce a supplementary water event if, in the Minister's opinion, any of the following apply:
 - (a) the flows can be stored in Lake Victoria water storage,
 - (b) the flows will contribute to the requirements to supply South Australia in accordance with the Murray-Darling Basin Agreement,
 - (c) the flows will contribute to reducing the surface water salinity measurement in the Murray River at Morgan when it is in excess of 800 electrical conductivity units,
 - (d) the water to be taken would assist in the reduction of existing medium or high blue-green algae alerts,
 - (e) the taking of water will prevent the commencement of a waterbird breeding event or threaten the success of an existing waterbird breeding event,

- (f) between 1 April and 30 October each year, the taking of water will prevent significant flow variations in those segments of the water source where flow heights are unaffected by weirs.
- (3) The Minister must not announce a supplementary water event in the Murray Water Source between 1 April and 30 October if, in the Minister's opinion, the taking of water will reduce beneficial flooding of the Barmah-Millewa forests or other Murray Water Source riverine ecosystems.
- (4) The Minister must not announce a supplementary water event in the Lower Darling Water Source if:
 - (a) the Menindee Lakes water storages are not full or flows upstream of the Lower Darling Water Source will not fill them,
 - (b) in the Minister's opinion, the water to be taken could be used to supply regulated river (general security) access licence allocations in the Murray Water Source,
 - (c) the taking of water will prevent flows in the Darling River from reaching 7,000 ML/day at Weir 32 (425012) for a period of time which, in the Minister's opinion, is sufficient to permit adequate passage of fish over Weir 32.
- (5) In making an announcement the Minister must consider whether and how access opportunities can be evenly shared between all holders of supplementary water access licences in the relevant water source.

Part 9 Access licence dealing rules

Notes.

- 1 Access licence dealings in the water sources are subject to the provisions of the Act, the regulations, any access licence dealing principles established under section 71A of the Act and the access licence dealing rules established under this Part.
- 2 At the commencement of this Plan the *Access Licence Dealing Principles Order 2004* applies. 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.
- 3 An application for a dealing may be refused or conditions applied on an access licence or water supply work approval at the time of a dealing to give effect to the provisions of this Plan.
- 4 This Part may be amended if individual daily extraction components are imposed on access licences in the water sources.

48 Conversion of access licence to new category

Dealings under section 71O of the Act are prohibited.

49 Assignment of rights dealings (within the water sources or within a water management area)

- (1) A dealing under section 71Q of the Act between access licences in the same water source is prohibited if the dealing:
 - (a) is 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,
 - (b) involves the regulated river (conveyance) access licence WAL9422,
 - (c) involves the regulated river (high security) access licence WAL9423.
- (2) A dealing under section 71Q of the Act that is from or to an access licence in another water source is prohibited.

50 Amendment of share component dealings (change of water source)

Dealings under section 71R of the Act are prohibited.

51 Assignment of water allocation dealings

A dealing under section 71T of the Act is prohibited in any of the following circumstances:

- (a) the dealing involves an assignment of water allocation from an access licence in the Murray Water Source that does not nominate a water supply work downstream of the Barmah Choke to an access licence in the Murray Water Source 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 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,

- (b) the dealing involves an assignment of water allocation to or from an access licence in one of the water sources to or from an access licence in another water source, unless the other water source is:
 - (i) the Murrumbidgee Regulated River Water Source, or
 - (ii) one of the water sources,
- (c) the dealing involves an assignment of water allocation from a local water utility access licence to an access licence of any other category in the Lower Darling Water Source if:
 - (i) the total volume of water stored in the Menindee Lakes is below 480,000 ML,
 - (ii) the total volume of water stored in the Menindee Lakes has not risen above 640,000 ML since the total volume stored last fell below 480,000 ML,
- (d) the dealing involves an assignment of water allocation to a supplementary water access licence from an access licence of any other category,

Note. At the commencement of this Plan, dealings under section 71T of the Act involving the assignment of water allocations from a supplementary water access licence to an access licence of any other category are also prohibited under clause 17 of the *Access Licence Dealing Principles Order 2004*.
- (e) the dealing would comply with the requirements of subclause (b), but in the Minister's opinion, the supply of the volume of water allocation to the receiving access licence is not physically possible,
- (f) the dealing would comply with subclause (b), but in the Minister's opinion, there is more than minimal likelihood that there will be a reduction in the water available to the environment under Division 1 or 2 of Part 10, basic landholder rights or access licences in the water sources,
- (g) the dealing would comply with subclause (b) but not with the Inter-Valley Trade Procedures established by the Minister.

52 Interstate access licence transfer and assignment of water allocations

- (1) A dealing under section 71U of the Act is prohibited unless administrative arrangements have been put in place by NSW and the other State or Territory and the interstate transfer of the access licence is to be made in accordance with those arrangements.
- (2) A dealing under section 71V of the Act is prohibited unless the dealing is in accordance with each of the following:
 - (a) the rules in Schedule D of the Murray-Darling Basin Agreement,
 - (b) the Inter-Valley Trade Procedures established by the Minister.
- (3) Dealings under section 71V of the Act are prohibited if any of the following circumstances apply:
 - (a) the dealing involves any of the following access licences:
 - (i) regulated river (conveyance) access licence WAL9422,
 - (ii) regulated river (high security) access licence WAL9423,
 - (b) in the Minister's opinion there is more than minimal likelihood that there will be a reduction in the water available to the environment under Division 1 or 2 of Part 10, basic landholder rights or access licences in the water sources,
 - (c) in the Minister's opinion the supply of the volume of water arising from the assignment is not physically possible,
 - (d) the application for the assignment of water allocation is received after 30 April in any water year.

53 Nomination of water supply work dealings

A dealing under section 71W of the Act is prohibited in any of the following circumstances:

- (a) 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,
- (b) the dealing involves an access licence in the Murray Water Source or Lower Darling Water Source, nominating a water supply work in a State other than NSW, unless the dealing is in accordance with the following:

- (i) the rules in Schedule D of the Murray-Darling Basin Agreement,
- (ii) the Inter-Valley Trade Procedures established by the Minister.

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Part 10 System operation rules

Note.

Operator and *NSW Environmental Water Manager* are defined in the Dictionary.

Division 1 Environmental water rules in the Murray Water Source

54 Definitions

In this Division:

average November water availability is the sum of available water determinations for, and water carried over in water allocation accounts of, regulated river (general security) access licences in the Murray Water Source as at 30 November,

exceptional circumstances means the situation when both of the following apply:

- (a) the average November water availability for the four years up to, and including, the current water year is less than 0.5 ML per unit share for all regulated river (general security) access licences in the Murray Water Source,
- (b) the situation described in (a) did not occur in the previous water year,

total natural inflows to Hume Reservoir are the natural inflows that would have occurred to Hume Reservoir but for the net effect of impoundments and losses in Dartmouth Dam and the Snowy Mountains Hydroelectric Scheme,

Victorian seasonal allocation mean the percentage of allocation made to the high reliability water share of a Victorian water licence in the Murray Water System as determined by Goulburn-Murray Water Rural Water Corporation.

55 Environmental water allowances in the Murray Water Source

- (1) The operator is to maintain the following environmental water allowances in the Murray Water Source, as set out in this Division:

- (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. The operating rules for the Barmah-Millewa Allowance are set out in the Barmah-Millewa operating rules. *Barmah-Millewa operating rules* is defined in the Dictionary. The rules in this Division outline NSW's obligations 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) The operator is to keep separate accounts of the water credited to and debited from each environmental water allowance established under subclause (1).

56 Credits to the Barmah-Millewa Allowance

- (1) The operator is to credit the Barmah-Millewa Allowance with the following volumes of water:
- (a) 50,000 ML multiplied by the Victorian seasonal allocation, minus the volume of the Barmah-Millewa Overdraw released in the preceding water year under clause 62, at any time a Victorian seasonal allocation is made,
 - (b) 25,000 ML, following each instance that the total natural inflow to Hume Reservoir reaches one of the trigger amounts in Column 3 of Table A, calculated over the corresponding number of calendar months in Column 2 of Table A prior to the corresponding day in Column 1 of Table A.

Table A — Triggers for crediting the Barmah-Millewa Allowance

Column 1 Day/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

- (2) If the operator has debited the Barmah-Millewa Allowance under clause 57 (1), the operator is to credit 25,000 ML to the Barmah-Millewa Allowance following the first instance between 1 September and 1 December that the total natural inflow to Hume Reservoir reaches one of the trigger amounts after the 1 August trigger in Column 3 of Table A,

calculated over the corresponding number of calendar months in Column 2 of Table A prior to the corresponding day in Column 1 of Table A.

- (3) If the operator has debited the Barmah-Millewa Allowance under clause 57 (2), the operator is to credit the Barmah-Millewa Allowance up to the volume debited in that water year or any previous water year and not yet recredited, whenever the sum of available water determinations for regulated river (general security) access licences equals the sum referred to in subclause 57 (2).

57 Debits from the Barmah-Millewa Allowance

- (1) If the operator makes a credit to the Barmah-Millewa Allowance under clause 56 (1) (b) following the trigger for 1 July being reached but the trigger for 1 August as specified in clause 56 (1) (b) is not reached, then any volume credited for July in the Barmah-Millewa Allowance must be debited from the allowance in September.
- (2) The operator must debit the Barmah-Millewa Allowance in accordance with subclause (3) whenever the sum of available water determinations for regulated river (general security) access licences in the Murray Water Source during a water year is less than the following:
 - (a) 0.3 ML per unit share for all regulated river (general security) access licences in the Murray Water Source, or
 - (b) 0.5 ML per unit share for all regulated river (general security) access licences in the Murray Water Source if exceptional circumstances apply.
- (3) The debit from the Barmah-Millewa Allowance under subclause (2) must be the lesser of:
 - (a) the volume necessary to permit the available water determinations for regulated river (general security) access licences in the Murray Water Source referred to in subclause (2), or
 - (b) the volume in the Barmah-Millewa Allowance.
- (4) Following a release of water under clause 58, the operator must debit from the Barmah-Millewa Allowance an amount of water calculated as set out in the Barmah-Millewa operating rules.

Note. *Barmah-Millewa operating rules* are defined in the Dictionary.
- (5) The debit of water made under subclause (4) must be in the following order:
 - (a) firstly, from any water in the Barmah-Millewa Allowance carried over from the

previous water year,

- (b) secondly, from any water credited to the Barmah-Millewa Allowance in that water year.

58 Releases from the Barmah-Millewa Allowance

- (1) The NSW Environmental Water Manager is to manage the Barmah-Millewa Allowance to provide environmentally beneficial outcomes for the Barmah-Millewa Forest, and other environmental outcomes, in accordance with the Barmah-Millewa operating rules and any procedures established by the Minister with the concurrence of the Minister for the Environment.
- (2) The operator is to make releases from the Barmah-Millewa Allowance in accordance with orders made by the NSW Environmental Water Manager and any procedures established by the Minister with the concurrence of the Minister for the Environment.
- (3) The NSW Environmental Water Manager may order water to be released from the Barmah-Millewa Allowance for environmental purposes other than beneficial outcomes for the Barmah-Millewa Forest, provided the volume to be released is not required to provide environmentally beneficial outcomes for the Barmah-Millewa Forest under any relevant interstate agreement.

59 Carryover rules for the Barmah-Millewa Allowance

- (1) The operator is to carry over any water remaining in the Barmah-Millewa Allowance from one water year to the next, provided the volume in the Barmah-Millewa Allowance does not exceed 350,000 ML at any time.
- (2) If any water carried over under subsection (1) remains in the Barmah-Millewa Allowance at the end of each month, the operator is to debit NSW's share of evaporation losses, as calculated under the Barmah-Millewa operating rules, from the Barmah-Millewa Allowance.

60 Barmah-Millewa Overdraw

- (1) The Minister may direct the operator to credit the Barmah-Millewa Overdraw with any available water, subject to the amount in the Barmah-Millewa Overdraw not exceeding 50,000 ML, when all of following circumstances apply:
 - (a) the sum of available water determinations for regulated river (general security) access licences in the water year has reached 1 ML per unit share,

- (b) there is sufficient water set aside for the making of an available water determination at the commencement of the following water year of 0.97 ML per unit share for regulated river (high security) access licences in the Murray Water Source.
- (2) The NSW Environmental Water Manager is to manage the Barmah-Millewa Overdraw to provide environmentally beneficial outcomes for the Barmah-Millewa Forest, and other environmental outcomes, in accordance with any relevant interstate agreements and any procedures established by the Minister with the concurrence of the Minister for the Environment.
- (3) The operator is to make releases from the Barmah-Millewa Overdraw in accordance with orders made by the NSW Environmental Water Manager and any procedures established by the Minister with the concurrence of the Minister for the Environment.
- (4) Following a release of water under subclause (3), the operator must debit from the Barmah-Millewa Overdraw an amount of water calculated as set out in the Barmah-Millewa operating rules.
- (5) The operator must carry over water in the Barmah-Millewa Overdraw from one water year to the next, provided that the volume in the Barmah-Millewa Overdraw does not exceed 50,000 ML at any time.

61 Murray Additional Allowance

- (1) Subject to subclause (2), the operator is to credit the Murray Additional Allowance with 0.03 ML per unit share of regulated river (high security) access licences in the Murray Water Source with share components expressed in unit shares, whenever the sum of available water determinations for those access licences in the water year reaches 0.97 ML per unit share.
- Note.** The clause above does not apply to subcategories of regulated river (high security) access licence as these licences are specific purpose access licences and have their share components expressed in ML per year rather than unit shares.
- (2) At any time, the Murray Additional Allowance must not exceed 0.15 ML per unit share of regulated river (high security) access licences in the Murray Water Source with share components expressed in unit shares.
- (3) The NSW Environmental Water Manager is to manage the Murray Additional Allowance for any purpose consistent with the environmental objectives in clause 8 of this Plan.
- (4) The operator is to make releases from the Murray Additional Allowance in accordance with orders made by the NSW Environmental Water Manager and any procedures established by

the Minister with the concurrence of the Minister for the Environment.

- (5) The operator is to debit the amount released under this clause from the Murray Additional Allowance in the following order:
 - (a) firstly, from any water carried over from the previous water year,
 - (b) secondly, from any water credited in that water year.

62 Withdrawals from the environmental water allowances due to dam spills

- (1) Whenever Hume Reservoir spills and all water has been withdrawn from the River Murray Increased Flows Account under clause 63 (4), the operator must withdraw from the Barmah-Millewa Allowance and the Murray Additional Allowance amounts of water equal to the NSW share of the volume of water spilled, as determined under the Murray-Darling Basin Agreement, minus the amount withdrawn from the River Murray Increased Flows Account under clause 63 (4).
- (2) The withdrawal of water under subclause (1) is to be as follows:
 - (a) firstly, from any water in the Murray Additional Allowance carried over from the previous water year,
 - (b) secondly, from any water in the Barmah-Millewa Allowance carried over from the previous water year,
 - (c) thirdly, in equal volumes from the water credited to the Murray Additional Allowance and the Barmah-Millewa Allowance in that water year,
 - (d) fourthly, from any water remaining in either the Murray Additional Allowance or the Barmah-Millewa Allowance subject to the volume in the Barmah-Millewa Allowance being no less than:
 - (i) 100,000 ML, plus
 - (ii) the volume equal to that taken from the Barmah-Millewa Allowance the previous year under clause 57 (2), up to 100,000 ML.

63 River Murray Increased Flows Account

- (1) The operator must maintain an account in the Murray Water Source of the water credited to and debited from the River Murray Increased Flows Account as set out in this clause.

- (2) The operator is to credit the River Murray Increased Flows Account whenever the Murray-Darling Basin Authority notifies the Minister that additional water is available in NSW's share of Hume Reservoir for crediting to the River Murray Increased Flows Account, as determined in accordance with the Strategy referred to in clause 20 of Schedule F of the Murray-Darling Basin Agreement.
- (3) The quantity of water to be credited to the River Murray Increased Flows Account under subclause (2) is the quantity of water the Murray-Darling Basin Authority notifies is available under subclause (2).
- (4) The operator must, whenever a spill of water from Hume Reservoir occurs, withdraw an amount of water from the River Murray Increased Flows Account that is equal to the lesser of the following:
 - (a) the amount of water in the River Murray Increased Flows Account,
 - (b) NSW's share of the water spilt from Hume Reservoir.
- (5) The operator must carry over any water remaining in the River Murray Increased Flows Account from one water year to the next water year.
- (6) The operator is to release River Murray Increased Flows Account water stored in Hume Reservoir in accordance with orders made by the NSW Environmental Water Manager and any procedures established by the Minister with the concurrence of the Minister for the Environment.
- (7) The operator is to debit the River Murray Increased Flows Account with the amount of water released under subclause (6).
- (8) The operator must not, under subclause (6), release more than the water in the River Murray Increased Flows Account at that point in time.

Division 2 Environmental water rules in the Lower Darling Water Source

64 Lower Darling Environmental Water Allowance

- (1) The operator must maintain a Lower Darling Environmental Water Allowance (*the Lower Darling Allowance*) in the Lower Darling Water Source.
 - (2) The Lower Darling Allowance must be maintained so that the volume of water in the
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Allowance at any time is as follows:

- (a) zero when the volume stored in Menindee Lakes is below 480,000 ML,
- (b) zero when the volume stored in Menindee Lakes has not risen above 640,000 ML since the volume stored last fell below 480,000 ML,
- (c) 30,000 ML minus any release from the Lower Darling Allowance during any water year that results 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 Rivers, whenever subclauses (a) and (b) do not apply.

Notes.

- 1 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.
 - 2 Paragraph (c) above means that if at the end of the water year there is less than 30,000 ML in the Lower Darling Allowance, then at the start of the following water year the Allowance is to be credited with an amount that will bring the total in the Allowance back to 30,000 ML.
- (3) Releases from the Lower Darling Allowance may be made for the management of water quality in the Lower Darling Water Source, including for, but not limited to, the following:
 - (a) the reduction of salinity levels,
 - (b) the management of dissolved oxygen levels,
 - (c) the mitigation of blue-green algae impacts.
 - (4) The operator is to make releases from the Lower-Darling Allowance at the request of the Minister.
 - (5) Releases made under this clause must not exceed:
 - (a) 2,000 ML per day from May to October, and
 - (b) 5,000 ML per day from November to April.

Division 3 Consultation

65 Consultation

The NSW Environmental Water Manager may consult with any government agency or the Murray Lower Darling Environmental Water Advisory Group (*EWAG*) established by the Minister for the Environment, or both, and consider any relevant advice, before taking action under this Part.

Notes. As at 1 July 2020, the Minister has conferred the lead role in managing environmental water allowances established under water sharing plans to the NSW Department of Planning, Industry and Environment – Environment, Energy and Science (*EES*). *EES* also administers and supports EWAGs to inform the management of environmental water allowances and licensed environmental water. For more information on EWAGs, see Cooperative management of environmental water to improve river and wetland health in NSW (2014), available from *EES*'s website at www.environment.nsw.gov.au.

Division 4 General system operation rules

66 Maintenance of water supply

- (1) In this clause, the period of lowest accumulated inflows to the water sources is identified by flow information held by the Department prior to 1 July 2004.
- (2) The operator must operate the water supply system in such a way that water would be able to be supplied during a repeat of the period of lowest accumulated inflows to the water sources, to meet the following:
 - (a) the annual water requirements of persons exercising domestic and stock rights and native title rights,
 - (b) available water determinations for domestic and stock access licences and local water utility access licence of 100% of share components,
 - (c) available water determinations in the Murray Water Source for subcategories of regulated river (high security) access licences of 100% of share components,
 - (c) available water determinations in the Murray Water Source for regulated river (high security) access licences with share components expressed in unit shares of 0.97 ML per unit share,
 - (d) available water determinations in the Lower Darling Water Source for regulated river (high security) access licences of 1 ML per unit share.

Note. *Water supply system* is defined in the Dictionary.

67 Water delivery and channel capacity constraints

- (1) In managing the water supply system, the operator must consider, determine and specify the operating channel capacities throughout the water sources in accordance with procedures established by the Minister, taking into account the following:
 - (a) the inundation of private land or interference with access,
 - (b) the effects of inundation on the floodplain and associated wetlands,

- (c) the transmission losses expected to occur,
- (d) the capacities of structures in the water supply system.

Note. *Transmission losses* is defined in the Dictionary.

- (2) The operator may refuse a water order for the delivery of water to a water supply work that is subject to a tagged trade, in accordance with the Inter-Valley Trading Protocols established by the Minister.

Note. *Tagged trade* is defined in the Dictionary.

68 Priority of delivery for access licences and EWA water

- (1) This clause does not apply to supplementary water access licences.
- (2) If supply capability is insufficient due to channel capacity in any segment of the water sources to satisfy all water orders, basic landholder rights and the delivery of EWA water, the following rules of priority apply:
 - (a) the operator is to give first priority to the requirements for water to satisfy basic landholder rights,
 - (b) once the requirements in (a) have been met, the operator is to supply water to domestic and stock access licences and local water utility access licences that have placed orders for water, in that order,
 - (c) once the requirements in (b) have been met, unless otherwise directed by the Minister, any remaining supply capability is to be shared between the following in accordance with any procedures established by the Minister with the concurrence of the Minister for Environment:
 - (i) regulated river (high security) access licences that have placed an order for water,
 - (ii) regulated river (conveyance) access licences that have placed an order for water,
 - (iii) regulated river (general security) access licences that have placed an order for water, and
 - (iv) EWA water deliveries that have been ordered.

- (4) For the purposes of this clause **EWA water** consists of the Barmah-Millewa Allowance, the Barmah-Millewa Overdraw, the Murray Additional Allowance and the Lower Darling Allowance.

Notes.

- 1 **Supply capability** is defined in the Dictionary.
2 This clause may be amended if individual daily extraction components are imposed.

69 Dam operation during floods and spills

The operation of all water storages in the water sources during times of flood and spilling of water from these water storages must be undertaken in accordance with the Murray-Darling Basin Agreement.

70 Airspace operation rules

Airspace operation of all water storages in the water sources must be in accordance with the Murray-Darling Basin Agreement.

Notes. **Airspace** is defined in the Dictionary.

71 Environmental flow reuse and piggybacking operation rules

- (1) The Minister may make a Pre-requisite Policy Measures (PPM) Procedures Manual for the water sources which sets out Environmental Flow Reuse Procedures and Piggybacking Procedures for the purposes of implementing the *NSW Prerequisite Policy Measures Implementation Plan* (NSW Department of Primary Industries – Water, May 2017).
- (2) The Commonwealth Environmental Water Holder, holders of access licences comprising licensed environmental water under section 8 of the Act and holders of access licences under which water is to be used only for environmental purposes as determined by the Minister, may order water under the Environmental Flow Reuse Procedures or the Piggybacking Procedures.

Note. This Plan may be amended in future to allow access licences other than those that are being used for environmental purposes only to order water in a manner consistent with the Environmental Flow Reuse Procedures and the Piggybacking Procedures.

- (3) A water order made under the Piggybacking Procedures may request that water be delivered from a particular water storage in the water sources.
- (4) The operator is to determine the water to be delivered for each order made under subclause (2) in accordance with the Environmental Flow Reuse Procedures and the Piggybacking Procedures.

- (5) The operator is to manage the water supply system in accordance with the Environmental Flow Reuse Procedures and the Piggybacking Procedures.

72 Lower Darling River Flow Restart Allowance

- (1) Whenever the total volume stored in Menindee Lakes falls to below 480,000 ML, the operator is to maintain a River Flow Restart Allowance in the Lower Darling Water Source (*the restart allowance*), as set out in this clause, for the purpose of managing the re-commencement of flows in the Lower Darling Water Source following a period of no flow.
- (2) The operator is to keep an account of the water credited to and debited from the restart allowance established under subclause (1).
- (3) The operator is to credit the restart allowance with the first 60,000 ML of inflow to the Menindee Lakes that occurs after the Darling River at Weir 32 (425 012) has ceased to flow for 10 consecutive days, subject to subclause (4).
- (4) The amount of water that may be held in the restart allowance at any point in time is 60,000 ML.
- (5) The operator is to make releases from the restart allowance at the request of the Minister.
- (6) The operator is to debit from the restart allowance:
- (a) the water released under subclause (5), and
 - (b) any amount as instructed by the Minister, and
 - (c) all water in the restart allowance when the volume stored in Menindee Lakes has risen above 640,000 ML since the volume stored last fell below 480,000 ML.
- (7) Water remaining in the restart allowance at the end of the water year is to be carried over to the next water year.
- (8) The water released under subclause (5) may be used to satisfy water orders in the Lower Darling Water Source to the extent determined by the Minister.

73 Inter-valley trade rules

The Minister may establish Inter-Valley Trade Procedures to set out the operational rules for managing the water supply system to facilitate the assignment of water allocations between the water sources and other water sources under clauses 51 and 52.

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Part 11 Mandatory conditions

Note. Mandatory conditions relating to metering equipment and recording of information are imposed by the *Water Management (General) Regulation 2018*. Clauses in this Plan that provide for mandatory conditions to be imposed in relation to metering apply only until the roll out of the metering and reporting mandatory conditions that are prescribed in Part 10 and Part 11 of the *Water Management (General) Regulation 2018*.

Division 1 General

75 Requirement to notify

In this Part, a requirement to notify the Minister in writing will only be satisfied by writing to the email address for enquiries on the Department's website.

Division 2 Access licences

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

75 Mandatory conditions on access licences

- (1) Each access licence must have mandatory conditions to give effect to the following:
 - (a) upon becoming aware of a breach of any condition of the access licence, the licence holder must:
 - (i) notify the Minister as soon as practicable, and
 - (ii) if the notification under paragraph (i) is not in writing, confirm the notification in writing within seven days of becoming aware of the breach,
 - (b) the taking of water in accordance with the access licence may only occur if the resulting debit to the access licence water allocation account does not exceed the volume of water allocation remaining in the account, except when water is taken under a regulated river (general security) access licence in accordance with an order made under clause 45 that permits the taking of uncontrolled flows.
 - (c) any other condition required to implement the provisions of this Plan.
- (2) Each access licence, other than a supplementary water access licence, must have a mandatory condition that the licence holder must not take water unless it has been ordered in accordance with procedures established by the Minister.
- (5) Each regulated river (general security) access licence must have a mandatory condition that the licence holder may only take water from uncontrolled flows in accordance with an order made by the Minister under clause 45.

- (6) Each supplementary water access licence must have a mandatory condition that gives effect to Division 2 of Part 8.
- (7) Each access licence, other than a supplementary water access licence, that at the commencement of the *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2003* nominated a water supply work in the Murray Water Source upstream of the Barmah Choke, must have a mandatory condition that permits water being taken from the Murray Water Source upstream of the Barmah Choke only.

Division 3 Water supply work approvals

Note. This Division is made in accordance with sections 17 (c) and 100 of the Act.

76 General conditions

- (1) Each water supply work approval must have mandatory conditions to give effect to:
 - (a) the clauses set out in this Division, and
 - (b) any other condition required to implement the provisions of this Plan.
- (2) 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 Part 8.
- (3) Upon becoming aware of a breach of any condition of the approval, the approval holder must:
 - (a) notify the Minister as soon as practicable, and
 - (b) if the notification under subclause (a) was not in writing, confirm the notification in writing within seven days of becoming aware of the breach.
- (4) Flow measurement devices must be installed and maintained on all water supply works used for extraction of water under an access licence and must be of a type and maintained in a manner which is acceptable to the Minister.
- (5) Water extraction, water management infrastructure and cropping details must be provided on request, in the form and in accordance with procedures established by the Minister.
- (6) The taking of water may only occur in accordance with the conditions applying to the access licence that will have its water allocation account debited for that take.

- (7) Despite subclause (1), subclauses (4) to (6) do not apply to approvals for water supply works held by Water NSW provided the approval is not nominated by an access licence.
- (8) Water supply work approvals held by Water NSW must have mandatory conditions to give effect to the provisions in Part 10.
- (9) If an approval for a water supply work is subject to a mandatory metering equipment condition in relation to the work, subclause (4) ceases to have effect in relation to the work on the day on which the condition applies to the approval.
- (10) If an approval for a water supply work is subject to a mandatory condition imposed by Part 10 or Part 11 of the *Water Management (General) Regulation 2018* relating to the recording or reporting of water that is taken by the work, subclause (5) ceases to have effect in relation to the work on the day on which the condition applies to the approval.

Note. The *Water Management (General) Regulation 2018* will impose a mandatory condition requiring record keeping on access licences and approvals in the water sources from 1 December 2022.

- (11) Subclauses (4), (5), (9) and (10) are taken to be repealed on the day on which the temporary exemption from the mandatory metering equipment condition ceases to apply to the water sources in accordance with clause 230 (1) of the *Water Management (General) Regulation 2018*.

Notes.

- 1 **Mandatory metering equipment condition** is defined in clause 228 of the *Water Management (General) Regulation 2018*.
- 2 Clause 230 of the *Water Management (General) Regulation 2018* provides that the mandatory metering equipment condition applies to new works required to have a meter from 1 April 2019, and to other access licences and approvals in the water sources from 1 December 2022.

Part 12 Amendment of this Plan

Note. This Part sets out the amendments authorised by this Plan.

77 General

- (1) For the purposes of section 45 (1) (b) of the Act, this Part provides for when this Plan may be amended and any such amendment is taken to be authorised by this Plan.

78 Amendments relating to Part 1

Part 1 may be amended to add, modify or remove a river or segment of river to or from the water sources providing that:

- (a) any amendment is consistent with any applicable regulated river order, and
- (b) the Minister is satisfied that there will be no impact on the water available to the environment under Division 1 and 2 of Part 10, or available to any access licence in the water sources.

79 Amendments relating to environmental flow reuse and piggybacking operation

This Plan may be amended to include alternate:

- (a) debiting rules for those access licences that order water under the Environmental Flow Reuse Procedures or the Piggybacking Procedures established under clause 71,
- (b) environmental flow reuse and piggybacking operation rules in clause 71.

80 Amendment of Plan relating to floodplain harvesting

This Plan may be amended to include rules for the management of floodplain harvesting.

Note. *Floodplain harvesting* is defined in the Dictionary.

81 Amendments relating to individual daily extraction components

This Plan may be amended to provide for individual daily extraction components.

82 Amendments relating to SDLAM projects

This Plan may be amended to provide for the implementation of any NSW sustainable diversion limit adjustment mechanism projects in the water sources under the Basin Plan.

83 Dictionary

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

84 Other amendments (general)

- (1) This Plan may be amended to include provisions for the following:
 - (a) the interception of water before it reaches a stream or aquifer by plantations or other means,
 - (b) the management of salt interception schemes,
 - (c) water return flows, as referred to in Division 5 of Part 2 of Chapter 3 of the Act,
 - (d) the conversion of regulated river (high security) access licences with share components that specify the water sources to access licences with share components that specify connected upstream unregulated water sources.
- (2) Division 3 of Part 6 may be amended to combine the long-term average sustainable diversion limit for the Murray Water Source with the long-term average sustainable diversion limit for the Murray Unregulated River Water Sources.
- (3) Division 3 of Part 6 may be amended to combine the long-term average sustainable diversion limit for the Lower Darling Water Source with the long-term average sustainable diversion limit for the Lower Murray-Darling Unregulated Water Source.
- (4) This Plan may be amended to facilitate total extractions reaching the long-term average annual extraction limit or long-term average sustainable diversion limit should an assessment of compliance with those limits made under Part 6 show that total extractions over the long term are in the Minister's opinion significantly less than those limits.
- (5) This Plan may be amended to give effect to, or in connection with, a determination of native title under the *Native Title Act 1993* of the Commonwealth.
- (6) 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.
- (7) Consequential amendments may be made to this Plan as a result of an amendment to the Act or regulations.

Dictionary

Aboriginal person has the same meaning as it has in section 4 of 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.

annual actual take has the same meaning as it has in section 6.10 of the Basin Plan.

annual permitted take has the same meaning as it has in section 6.10 of the Basin Plan.

Barmah-Millewa operating rules means the document entitled Operating Rules for the Barmah-Millewa Forest Environmental Watering Allocation (B-MF EWA) 2006/13 as approved by the Murray-Darling Basin Ministerial Council, or any replacement of that document.

baseline diversion limit has the same meaning as it has in section 1.07 of the Basin Plan.

Basin Plan means the *Basin Plan 2012* made under section 44 (3) (b) (i) of the *Water Act 2007* of the Commonwealth.

flow regimes mean, collectively, the magnitudes, durations, frequencies and patterns of flows that characterise a river or water source.

Minister means the Minister administering the Act.

ML means megalitres.

Murray-Darling Basin Agreement means the Murray-Darling Basin Agreement in Schedule 1 of the *Water Act 2007* of the Commonwealth.

Murray-Darling Basin Authority has the same meaning as the ‘Authority’ has in the *Water Act 2007* of the Commonwealth.

Murrumbidgee Regulated River Water Source is as defined in the *Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2016*.

natural flow means a flow that occurs in a watershed or waterbody under natural unregulated conditions.

NSW Environmental Water Manager means the NSW Government department or agency whose responsibility it is to manage licensed environmental water that is held by the NSW Government.

Note. As at 1 July 2020, this is the NSW Department of Planning, Industry and Environment – Environment, Energy and Science (EES).

operator means the operator of the water supply system for the water sources.

Note. At the commencement of this Plan, this is the Murray Darling Basin Authority, except when, for the Lower Darling Regulated River Water Source, the operation of Menindee Lakes comes into the control of NSW in accordance with the Murray Darling Basin Agreement.

plantation forestry means a commercial plantation as defined in section 1.07 of the Basin Plan.

SDL resource unit shared reduction amount has the same meaning as it has in section 1.07 of the Basin Plan.

Snowy Mountains Hydroelectric Scheme means the works, activities and other things declared to be existing Scheme development under the *Snowy Hydro Corporatisation Act 1997*.

supplementary water event means a period during which the taking of water under supplementary water access licences is permitted in all or part of the water sources.

supply capability means the rate at which the Minister determines water can be supplied to a segment of the water sources without incurring unacceptable transmission losses.

target ecological populations means communities of one or more species that are monitored to evaluate the success of targeted objectives for the environment. Populations must be easily monitored (i.e. not rare or cryptic) and may be linked to conservation or other environmental priorities.

tagged trade means a dealing under section 71W (1) (b) or (c) of the Act.

transmission losses means the additional water required to ensure that a specified quantity of water is delivered to a specified delivery point.

uncontrolled flows means flow in excess of that needed to meet the following:

- (a) the environmental water rules in Divisions 1 and 2 of Part 10 that are relevant to the respective water source,
- (b) the requirements for basic landholder rights in the respective water source,
- (c) the requirements of higher priority access licences in the respective water source.

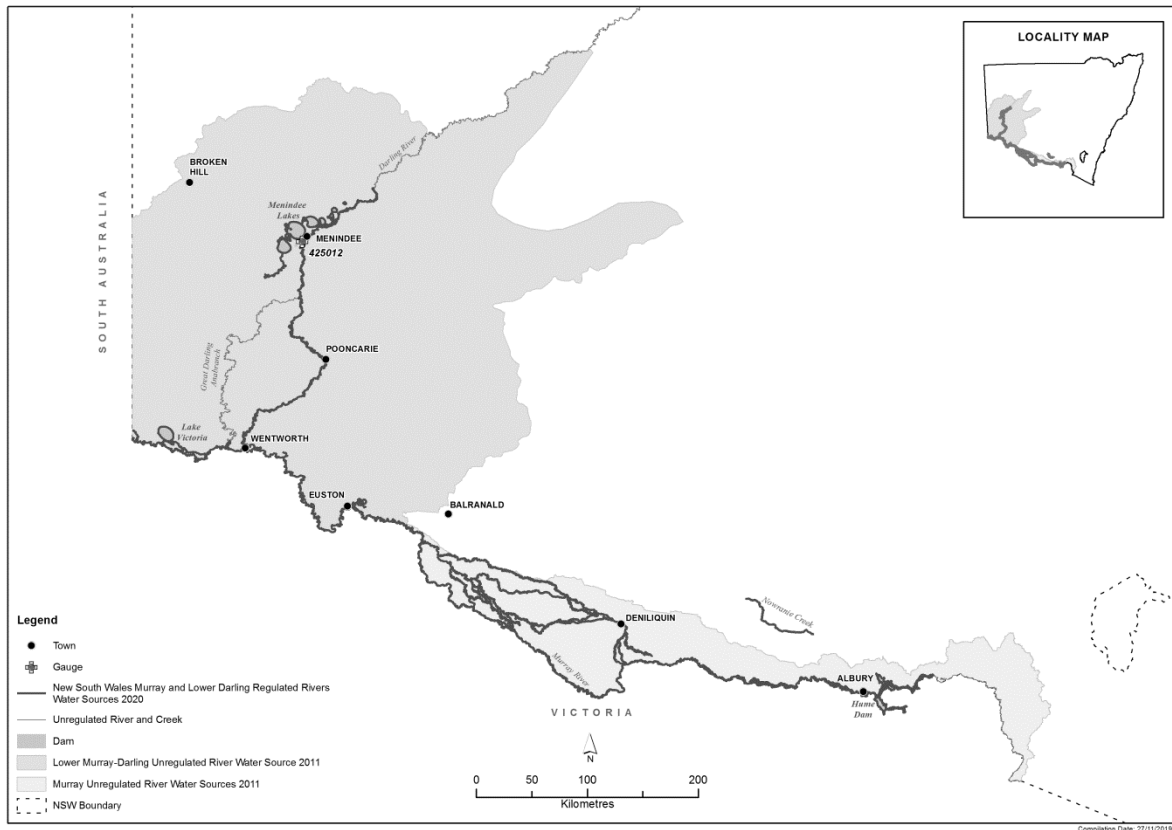
water storage means a state owned dam, weir or other structure that is used to regulate and manage river flows in the water sources and the water body impounded by this structure.

water supply system means the water storages and all other infrastructure that can influence water supply controlled by the Minister, including regulators and weirs.

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

weighted average unit price means the total value of all units sold divided by the number of units sold for a monetary value.

Appendix 1 Overview map of the Murray Water Source and Lower Darling Water Source



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