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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 of this Plan provides.

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Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the NSW 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 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 has effect for 10 years from 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 agreed to develop water resource plans for Murray-Darling Basin water resources consistent with the requirements of the Basin Plan. This Plan was replaced in 2020, partly to meet NSW's commitments under these agreements. The water resource plan for the New South Wales Murray and Lower Darling surface water area commences on 2020. Certain provisions of this Plan form part of that water resource plan.

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 Anabranh 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.

- 1 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
- 2 The water source does not include the following:
 - (a) the Murray Unregulated River Water Sources to which the *Water Sharing Plan for the Murray Unregulated River Water Sources 2011* applies,
 - (b) the Lower Murray-Darling Unregulated River Water Sources to which the *Water Sharing Plan for the Lower Murray Darling Unregulated River Water Sources 2011* applies,
 - (c) the Murray Alluvial Water Sources to which the *Water Sharing Plan for the Murray Alluvial Groundwater Sources 2020* applies,
 - (d) the Lower Murray-Darling Alluvial Water Sources to which the *Water Sharing Plan for the Darling Alluvial Groundwater Sources 2020* applies.

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 that Dictionary.
- (3) Unless otherwise specified, a reference to the *Water Sharing Plan for the Murray Unregulated and Alluvial Water Sources 2011* or the *Water Sharing Plan for the Lower Murray-Darling Unregulated and Alluvial Water Sources 2011* includes a reference to any plan that replaces those plans.
- (4) Unless otherwise specified, a clause that applies to a category of access licence also applies to any subcategories of that category of access licence.
- (5) The Dictionary and Schedules to this Plan form part of this Plan.
- (6) A number in brackets following the name of a gauge is the gauge number.
- (7) Notes in the text of this Plan do not form part of this Plan.
- (8) Appendices to this Plan do not form part of this Plan.

Part 2 Vision, objectives, strategies and performance indicators

Notes.

- 1 This Part is made in accordance with section 35 (1) of the Act.
- 2 Monitoring, evaluation and reporting (MER) plans have been developed for the water source and are available on the Department's website. The MER plans describe 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 and identify whether they are managed under this Plan, the Murray-lower Darling Long Term Water Plan, or both plans,
 - (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.

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 productive and economically efficient use of water resources,
- (c) the social and cultural benefits to urban and rural communities that result from the sustainable and efficient use of water,
- (d) the spiritual, social, customary and economic benefits to Aboriginal communities that result from the sustainable and efficient use of 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 (instream, riparian and floodplain ecosystems) over the term of this Plan.

Notes.

- 1 **Broad objective** is defined in the Dictionary.
 - 2 The ecological condition of the water sources includes high ecological value aquatic ecosystems, target species, communities, populations and key ecosystem functions as defined in the Murray-Lower Darling Long Term Water Plan and the NSW Murray and lower Darling Surface Water Monitoring, Evaluation and Reporting Plan for Environmental Objectives.
- (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 **Targeted objectives** and **Target ecological populations** are defined in the Dictionary
- 2 Target ecological populations in this water source that may be managed by this Plan include known or predicted populations of:
 - (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 Significant wetlands within this water source, and the associated ecological communities such as waterbirds and vegetation including Moira grasslands and lignum shrubland, are primarily managed by the Environmental Watering Advisory Group (EWAG) and the Southern Connected Basin Environmental Watering Committee (SCBEWC), according to the conditions of this Plan. The targeted objectives, management and monitoring activities for these assets and communities are provided in the Murray-lower Darling Long Term Water Plan, the EWAG and SCBEWC annual watering plans and the MER Plan for this water source.

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

Notes.

- 1 Target ecological processes in this water source include:
 - (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 source
 - (b) fish movement across significant barriers, as identified by NSW Department of Primary Industries Fisheries and described in the MER Plan for this water source.
- 2 Connectivity may be within this water source, between this water source and water sources in the *Water Sharing Plan for the Murray Unregulated River Water Sources 2012*, the *Water Sharing Plan for the lower Murray-Darling Unregulated Water Sources 2011*, or South Australian River Murray connected water sources

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

Note. Water quality targets for the water source 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) support environmental watering in the water source to contribute to maintaining or enhancing ecological condition in streams, riparian zones, dependent wetlands and floodplains.

Note. Part 10 Division 1 and Division 2 outline the provisions for the environmental water allowances in the Murray and Lower Darling Water Sources. These environmental water allowances are managed by an Environmental Watering Advisory Group according to the rules in this Plan, and guided by the Murray and Lower Darling Long-term Watering Plan,

and the EWAG and SCBEWC Annual Watering Plans.

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

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

Notes. The application of the long-term average annual extraction limit and the long-term average sustainable diversion limit and the assessment and compliance rules in Division 1 and Division 2 of Part 6 of this Plan ensure that all water in excess of those limits is reserved for the environment. These provisions contribute to the objectives in subclause (2).

(b) reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in this water source, and

Notes.

1 **Flow regimes** is defined in the dictionary

2 The provisions in clause 49 of this Plan partially mitigate alterations to natural flow regimes in this water source by permitting a supplementary water event to occur once all requirements for planned environmental water have been met. These provisions contribute to the objectives in subclause (2).

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

Notes. The provisions in clause 49 of this Plan contribute to maintaining the hydrological connectivity between the water source and connected wetlands by permitting a supplementary water event to occur once the connectivity requirements outlined in clause 49 for planned environmental water have been met.

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

Note. The rules in Division 1 and 2 of Part 10 of this Plan ensure that environmental water allowances are maintained for environmental watering. These rules contribute to the objectives in subclause (2).

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

Notes:

1 The rules in clause 62 seek to minimise blue green algal events in the Lower Darling Water Source.

2 The rules in Division 1 and 2 of Part 10 of this Plan ensure that environmental water allowances are maintained for environmental watering in the Murray Water Source. These rules contribute to all the objectives in subclause (2)

(4) The performance indicators used to measure success in reaching the broad environmental objective in subclause (1) will be evaluated by determining 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 success in achieving the targeted environmental objectives in subclause (2) are the changes or trends in the following:

- (a) the recorded range or extent of target ecological populations,
- (b) the recorded condition of target ecological populations,
- (c) measurements of carbon and nutrient transport pathways and fish movements through priority fish passage areas,
- (d) the recorded values of water quality measurements including salinity, turbidity, total nitrogen, total phosphorous, pH, water temperature and dissolved oxygen,
- (e) the extent to which the Environmental Watering Advisory Group considers that the provisions in Divisions 1 and 2 of Part 10 have facilitated effective environmental watering,
- (f) the extent to which the strategies in subclause (3) have provided flow conditions of sufficient magnitude, frequency, timing and water quality to achieve targeted environmental objectives.

Note. One or more performance indicators will be measured for each of the targeted objectives listed in subclause 2, and strategies listed in subclause 3.

- (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 changes in the performance indicators can be attributed to the strategies and rules in this Plan,
 - (b) the extent to which the strategies and rules in this Plan have been implemented and complied with,
 - (c) the extent to which external influences on these water sources have affected progress toward achieving the environmental objectives

Note. External influences may include long and short-term climate trends, land use patterns and other factors.

9 Economic objectives

- (1) The broad economic objective of this Plan is to maintain access to water to optimise economic benefits for irrigation, water dependent industries and local economies.
- (2) The targeted economic objectives of this Plan are as follows:
 - (a) to maintain and, where possible improve water trading opportunities for water-dependent economic activities,

Note. Trading is a generic term referring to dealings under Division 4 of Part 2 of the Act.
 - (b) to maintain or enhance access to water, up to the extraction limit for agriculture, business and landholders,
 - (c) maintain water quality within target ranges for agriculture, business and

landholders.

Note. Water quality targets for the water source 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

- (3) The strategies for reaching the economic objectives of this Plan are as follows:
- (a) to provide a stable and predictable framework for sharing water among water users,

Note. The individual account management provisions in Part 8 and priority of extraction rules in clause 69 provide certainty in how water will be shared between individual access licence holders and different categories of access licences. These provisions contribute to all of the objectives in subclause (2).
 - (b) where possible, to provide for flexibility of access to water,

Note. The individual account management rules in Division 1 and 2 of Part 8 provide flexibility that reflects the characteristics of the licence category. These rules contribute to the objective in subclause (2) (b).
 - (c) to manage extractions to the long-term average annual extraction limit and the cumulative annual extraction limit, and provide rules for managing extractions within those limits that recognise different 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 rules in Part 6 of this Plan manage extractions to different climatic conditions in different years. These rules contribute to the objectives in subclause (2).
 - (d) to provide for trade of water allocations and entitlements within the water source, subject to environmental and system constraints,

Note. The rules in Part 9 of this Plan 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. These rules contribute to the objectives in subclause (2).
 - (e) to provide for supplementary water access, subject to announcements, to a portion of uncontrolled flows,

Note. The rules in clause 49 of this Plan describe the access conditions during supplementary water events. These rules contribute to the objectives in subclause (2).
 - (f) reserve a portion of natural flows to partially mitigate any deterioration in water quality due to alterations to natural flow regimes.
- Notes.**
- 1 **Flow regimes** is defined in the Dictionary.
 - 2 The rules in Divisions 1 and 2 of Part 10 of this Plan mitigate the alterations to low and medium flows in the natural flow regime of this water source. These rules contribute to the objective in subclause (2).
- (4) The performance indicators used to measure success in reaching the broad economic objective in subclause (1) will be evaluated by determining 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 success in achieving the targeted economic objectives in subclause (2) are the changes or trends in economic benefits, including the changes or trends in 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 including changes or trends in the following:
 - (i) the change in the unit price of water that is subject to a dealing,
 - (ii) the annual total number of access licence share components subject to a dealing,
 - (iii) the weighted average price of water traded within the water source,
Note. *Weighted average price* is defined in the Dictionary.
 - (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 stakeholders have considered the operation of this Plan to be clearly explained and predictable,
 - (b) water made available during the term of this plan through available water determinations and the granting of new licences,
 - (c) the extent to which changes in the economic benefits of water extraction and use can be attributed to the strategies in subclause (3) and rules in this Plan.
 - (d) external influences on the water source during the term of this Plan have affected progress towards achieving the broad objective.

Note. External influences may include trends in urban, agricultural and industrial development, energy costs, commodity prices, interest rates, technology advances and changes in policy or regulation.

10 Aboriginal cultural objectives

- (1) The broad Aboriginal cultural objective of this Plan is to maintain and, where possible enhance 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,
Note. Relevant fish species in these water sources may include golden perch and Murray cod.
 - (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.
Note. Water quality targets for the water source 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
- (3) The strategies for reaching the Aboriginal cultural objectives of this Plan are the following:
- (a) to manage access to water consistently with the exercise of native title rights,
Note. Clause 17 of this Plan ensures the provision of water associated with a native title determination. This provision contributes to the objective in subclause (2) (a).
 - (b) to provide for water associated with Aboriginal cultural values and uses,
Note. The rules in Part 6 of this Plan provide opportunities for Aboriginal people to access water by allowing for the granting of an access licence of the subcategory 'Aboriginal cultural'. This rule contributes to the objective in subclause (2) (b).
 - (c) to reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in the water source,
Note: The provisions in clause 47 of this Plan partially mitigate alterations to natural flow regimes in this water source by permitting a supplementary water event to occur once all requirements for planned environmental water have been met. These provisions contribute to the objectives in subclause (2).
 - (d) to reserve a portion of natural flows to maintain hydrological connectivity between the water source and riparian zones, wetlands and floodplains connected to the water source,
Note. The provisions in clause 47 of this Plan contribute to maintaining the hydrological connectivity between the water source and connected wetlands by permitting a supplementary water event to occur once the connectivity requirements outlined in clause 47 for planned environmental water have been met.
 - (e) minimise adverse impacts of water delivery on Aboriginal cultural values and uses.
Note. The provisions for water delivery and channel capacity constraints, priority of extractions for access licences and the environmental water account, rates of change to storage releases, supply of orders when remaining allocations are low and dam operation during floods and spills in Division 4 Part 10 of this Plan minimise the impact of water delivery on the community. These provisions contribute to all the objectives in subclause (2).
- (4) The performance indicators used to measure success in reaching the broad Aboriginal cultural objective in subclause (1) will be evaluated by determining 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 success in achieving the targeted Aboriginal cultural objectives in subclause (2) will be evaluated as follows:

- (a) by comparing changes, or trends in, the use of water by Aboriginal people during the term of this Plan by measuring factors including:
 - (i) the extent to which native title rights are able to be exercised, consistently with any determination of native title, and
 - (ii) the extent to which access to water has achieved Aboriginal cultural outcomes,
- (b) by comparing changes, or trends in, the recorded range or extent of target populations of native fish
- (c) by comparing changes, or trends in, the recorded range or condition of target populations of riparian vegetation,
- (d) by considering the extent to which the protection of identified cultural assets can be attributed to the strategies in subclause (3) and rules in this Plan,
- (e) by considering the extent to which changes in the use of water by Aboriginal people can be attributed to the strategies in subclause (3) and rules in this Plan,
- (f) by comparing changes, or trends in, the recorded values of water quality measurements including salinity, harmful algal blooms, total nitrogen, total phosphorus, pH, water temperature and dissolved oxygen.

Note. One or more performance indicators will be measured for each of the targeted objectives listed in subclause (2), and strategies listed in subclause (3).

(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 Aboriginal people have considered the operation of this Plan to be clearly explained and predictable,
- (b) the extent to which Aboriginal people have considered the operation of this Plan to be beneficial to meeting their needs for water-dependent cultural uses and values,
- (c) water made available during the term of this Plan through available water determinations and granting of new licences
- (d) the extent to which external influences on these water sources have affected progress toward achieving the Aboriginal cultural objectives.

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

policy or regulation

11 Social and cultural objectives

- (1) The broad social and cultural objectives of this Plan are to maintain and, where possible enhance the efficient and sustainable access to water to support critical human needs, and water dependant values, culture, heritage and recreational uses.
- (2) The targeted social and cultural objectives of this Plan are to maintain and, where possible enhance the following:

- (a) access to water for critical human needs, town water supply and domestic and stock purposes,

- (b) access to water for water dependent cultural, heritage and recreational uses, including recreational fishing,

Note. Native recreational fish species that are relevant to these water sources include golden perch and Murray cod.

- (c) water quality within target ranges for critical human needs, town water supply, domestic and stock purposes and water dependent cultural, heritage and recreational uses, including recreational fishing.

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.

- (3) The strategies for reaching the social and cultural objectives of this Plan are as follows:

- (a) to provide water access for critical human needs, town water supply, and for domestic and stock purposes,

Note. The rules for the maintenance of water supply and replenishment flows in Part 10 of this Plan ensure that water is available for basic human needs, town water supply and domestic and stock purposes. These rules contribute to the objective in subclause (2) (a).

- (b) to reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in this water source,

Note: The provisions in clause 47 of this Plan partially mitigate alterations to natural flow regimes in this water source by permitting a supplementary water event to occur once all requirements for planned environmental water have been met. These provisions contribute to the objectives in subclause (2).

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

Note: The provisions in clause 47 of this Plan partially mitigate alterations to natural flow regimes in this water source by permitting a supplementary water event to occur once all requirements for planned environmental water have been met. These provisions contribute to the objectives in subclause (2).

- (d) to minimise adverse impacts of water delivery on community values and uses.

Note. The rules for water delivery and channel capacity constraints, priority of extractions for access licences and the environmental water account, rates of change to storage

releases, supply of orders when remaining allocations are low and dam operation during floods and spills in Division 4 of Part 10 of this Plan minimise the impact of water delivery on the community. These rules contribute to all the objectives in subclause (2).

(4) The performance indicators used to measure success in reaching the broad social and cultural objective in subclause (1) will be evaluated by determining 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 success in reaching the targeted social and cultural objectives in subclause (2) will be evaluated as follows:

(a) by comparing changes, or trends in, the social and cultural uses of water during the term of this Plan by measuring factors including:

(i) the extent to which basic landholder, domestic and stock rights have been met, and

(ii) the extent to which major utility and local utility access licence requirements have been met,

(b) by comparing changes, or trends in, the recorded range or extent of target populations of native fish that are important for recreational fishing,

(c) by comparing changes, or trends in, the recorded takes of native fish that are important for recreational fishing within legal age and size classes,

(d) comparing changes, or trends in, the recorded values of water quality measurements including salinity, harmful algal blooms, total nitrogen, total phosphorus, pH, water temperature and dissolved oxygen.

Note. One or more performance indicators will be measured for each of the targeted objectives listed in subclause (2), and strategies listed in subclause (3).

(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 stakeholders have considered the operation of this Plan to be clearly explained and predictable

(b) water made available during the term of this Plan through available water determinations and granting of new licences

(c) the extent to which changes in the social and cultural use of water can be attributed to the strategies in subclause (3) and rules in this Plan,

(d) the extent to which external influences on this water source during the term of this Plan have affected progress toward achieving the social and cultural objectives.

Note. External influences may include trends in urban, agricultural and industrial development, social or cultural behaviour, long or short term trends in 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 in the water sources 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 of this Plan,
 - (c) the requirements for water for extraction under access licences identified under Part 5,
 - (d) the access licence dealing provisions established under Part 9.
- (2) The bulk access regime:
 - (a) establishes provisions according to which:
 - (i) access licences are 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 managed as provided for in Part 8,
 - (b) establishes provisions 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 limits to the availability of water 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

- (1) This Plan recognises the effects of climatic variability on river flow in the water sources through provisions contained in Part 6 of this Plan 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 sections 8 and 20 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:

- (1) the commitment of the physical presence of water in the water source,
- (2) the long-term average annual commitment of water as planned environmental water,
- (3) the water that is not committed after the commitments to basic landholder rights and for sharing and extraction under any other rights have been met.

16 Establishment and maintenance of planned environmental water

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

- (a) the physical presence of water resulting from the following:

- (i) the environmental water rules in the Murray Water Source specified in Part 10,

Note. The provisions in 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 Part 10,

Note. The provisions in Part 10 establish an environmental water allowance which can be used to make releases for environmental 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,
 - (c) water remaining after water has been taken under basic landholder rights and access licences and any other rights under the Act, in accordance with the rules in Part 6 and 8 of this Plan.
- (2) The planned environmental water established under subclause (1) (a) is maintained by the environmental water allowance and release provisions in Part 10 and 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.
 - (4) The planned environmental water established under subclause (1) (c) is maintained by the provisions specified in Part 6 and 8.

Note. The rules in Part 6 of this Plan ensure that there will be water remaining in the water source 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 lower available water determinations when either of the limits has been assessed to have been exceeded.

Part 5 Requirements for water

Division 1 General

17 General

- (1) This Part identifies the requirements for water in the exercise of basic landholder rights (Division 2) and for extraction under access licences (Division 3) in the water sources.
- (2) The volumes of water specified in this Part represent, as at 1 July 2019, the estimated requirements for water to satisfy basic landholder rights and the total volumes or unit shares specified in the share components of access licences in the water sources.
- (3) This Plan recognises that requirements for water for basic landholder rights and the total share components of 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 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 without first being tested and, if necessary, appropriately treated. Such testing and treatment is the responsibility of the water user.

Minister's note.

The estimates, share components and numbers of licences referred to in this Part are as at the commencement of this Plan in 2016, but will be updated before the amendments commence to be accurate as at 1 July 2019.

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. However, there are no harvestable rights in the water sources under this Plan.

18 Domestic and stock rights

As at 1 July 2019, 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 on the taking and use of 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.

Notes.

- 1 The map in Appendix 2 indicates the locations covered by the native title determinations in relation to the water source.

- 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 NSW Department of Planning, Industry and Environment provides a record of licensed environmental water, as well as other water intended to be used for environmental purposes.
- 2 As at 1 July 2019, 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 2019, 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. 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 source as at 1 July 2019. 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

As at 1 July 2019, 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

As at 1 July 2019, 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) As at 1 July 2019, 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) As at 1 July 2019, 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

As at 1 July 2019, 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

As at 1 July 2019, the share components of regulated river (general security) access licences total:

- (a) 1,672,226 unit shares in the Murray Water Source,
- (b) 78,099 unit shares in the Lower Darling Water Source.

25 Share components of supplementary water access licences

As at 1 July 2019, 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.

26 Share components of River Murray increased flows access licences

As at 1 July 2019, the share components of River Murray increased flows access licences total 35,000 unit shares in the Murray Water Source.

Minister's note

The Department of Planning, Industry and Environment – Water is considering alternate proposals for recognising the River Murray increased flows volume. The two proposals are for this water to be recognised as:

- an entitlement as currently included in the draft plan under clause 26, with water allocation and account management rules as set out in Parts 6 and 8, or

- a planned environmental water account with the same accounting rules which would be included in Part 10.

Public feedback on a preferred option is sought before this issue is resolved.

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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

27 Exclusions, inclusions and variations in calculations

- (1) This clause applies to the calculation of the following limits and extraction:
 - (a) the long-term average annual extraction limit under clause 28,
 - (b) the average annual extraction under clause 29,
 - (c) the annual permitted take under clause 32,
 - (d) the annual actual take under clause 33.
- (2) The calculation by the Minister of the extraction, water take and limits to which this clause applies must:
 - (a) exclude the following:
 - (i) allocations assigned from an access licence in the 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 29 only, water committed as licensed environmental water under section 8F of the Act,
 - (b) include allocations assigned to an access licence in the water source from an access licence in another water source under section 71T of the Act, and
 - (c) in relation to the long-term average annual extraction limit only, be varied by any change to the amount of water committed as licensed environmental water under section 8F of the Act.
- (3) The calculation by the Minister of the long-term average annual extraction limit under clause 29 must be reduced by a volume that appropriately reflects the following:
 - (a) the share components of water access licences in the water source that are subject to a dealing under section 71U of the Act.

Division 2 Long-term average annual extraction limit

28 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 source in accordance with this clause and clause 27.
- (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 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 commercial plantations 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*.

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 Initiative. 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 calculated based on the following:
 - (i) the water storages and water use development that existed in 2000/2001,
 - (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 commercial plantations 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 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 The baseline diversion limit for the New South Wales Murray SDL resource unit as defined in Schedule 3 of the Basin Plan includes the long-term average annual extraction limit for the Murray Water Source and the long-term average annual extraction limit under the *Water Sharing Plan for the Murray Unregulated River Water Sources 2011*.
- 4 The baseline diversion limit for the Lower Darling SDL resource unit as defined in Schedule 3 of the Basin Plan includes the long-term average annual extraction limit for the Lower Darling Water Source and the long-term average annual extraction limit under the *Water Sharing Plan for the Lower Murray-Darling Unregulated River Water Sources 2011*.
- 5 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.
- 6 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.

29 Calculation of average annual extraction

- (1) The Minister, using the hydrological computer model approved by the Minister, is to calculate the average annual extraction 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 rules in this Plan applying in that water year,
 - (d) the level of development for commercial plantations 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,
- (c) the River Murray increased flows access licence.

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

- (1) Following the calculations under clauses 28 and 29, the Minister is to compare average annual extraction against the long-term average annual extraction limit.
- (2) There is non-compliance with the long-term average annual extraction limit for the Murray Water Source if average annual extraction exceeds:
 - (a) the long-term average annual extraction limit by the following:
 - (i) 3% or more,
 - (ii) more than half the difference between the average annual extraction calculated under clause 28 (2) (a) and (b),
 - (iii) the amount calculated under clause 28 (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 exceeds:
 - (a) the long-term average annual extraction limit by the following:
 - (i) 3% or more,
 - (ii) more than half the difference between the average annual extraction calculated under clause 28 (3) (a) and (b),
 - (iii) the amount calculated under clause 28 (3) (b).

Division 3 Long-term average sustainable diversion limit

31 Calculation of the long-term average sustainable diversion limit

- (1) The long-term average sustainable diversion limit for the Murray Water Source is:
 - (a) the component of the baseline diversion limit for the water source within the New South Wales Murray surface water SDL resource unit as determined under Schedule 3 of the Basin Plan, 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) The long-term average sustainable diversion limit for the Lower Darling Water Source is:

- (a) the component of the baseline diversion limit for the water source within the Lower Darling surface water SDL resource unit as determined under Schedule 3 of the Basin Plan, 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.

Notes.

- 1 **long-term average sustainable diversion limit** is defined in section 4 of the *Water Act 2007* of the Commonwealth. **Baseline diversion limit** is defined in section 1.07 of the Basin Plan and **SDL resource unit shared reduction amount** is defined in Schedule 2 of the Basin Plan.
- 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.

32 Calculation of annual permitted take for the water year

- (1) Following the end of each water year, the Minister is to calculate the annual permitted take of water 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.

Note. **Annual permitted take** is defined in section 6.10 of the Basin Plan. Under that section, take of licensed environmental water and under licences held by the Commonwealth Environmental Water Holder are not included in this assessment as they fall outside the definition of take for consumptive use. **Take** and **consumptive use** are defined in section 4 of the *Water Act 2007* of the Commonwealth.

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

- (1) Following the calculations under clauses 31 and 32 at the end of each water year, the Minister is to, in accordance with the requirements of Division 2 of Part 4 of Chapter 6 of the Basin Plan:
 - (a) compare annual actual take of water against the annual permitted take, and
 - (b) maintain a cumulative balance of the difference between annual actual take and annual permitted take.

Note. **Annual actual take** is defined in section 6.10 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 limits

34 Action following non-compliance

- (1) For the Murray Water Source, if an assessment under clauses 30 or 33 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 an available water determination for supplementary water access licences under clause 42 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 35 (3).

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

- (2) For the Lower Darling Water Source, if an assessment under clauses 30 or 33 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 an available water determination for supplementary water access licences under clause 42 of less than 1 ML per unit share,
- (a) in relation to available water determinations for regulated river (general security) access licences reduce the limit under clause 35 (3).

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

- (3) An action under this clause is to be taken to the extent to which 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 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.

- (4) The Minister must not take action under subclause (1) (b) or (2) (b) unless the Minister has made an available water determination for supplementary water access licences of zero under subclause (1) (a) or (2) (a) in the respective water source.

- (5) An action under this clause to reduce the limit to available water determinations for regulated river (general security) access licences under clause 35 (3), may be partially or completely reversed if a subsequent assessment under clause 30 or 33 demonstrates that:
- (a) current long-term average annual extractions in the water source are below the respective long-term average annual extraction limit by more than 3% or more than half the difference between the amounts calculated under clauses 28 (2) (a) and (b) for the Murray Water Source and clauses 28 (3) (a) and (b) for the Lower Darling Water Source,
 - (b) the cumulative balance as determined under Division 2 of Part 4 of Chapter 6 of the Basin Plan is a credit amount.
- (6) An action under subclause (5) is to be taken to the extent the Minister considers necessary to return long-term average annual extraction in the water source to the long-term average annual extraction limit and long-term average sustainable diversion limit for that water source.
- (7) 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

35 General

- (1) Available water determinations for access licences are to be expressed as one of the following:
- (a) for access licences specifying share components in ML/year – a percentage of the share component,
 - (b) for 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 an access licence where share components are specified as ML/year – 100% of the access licence share component,
 - (b) for an access licence specifying the share component as a number of unit shares – 1 ML per unit share of the access licence share component.

- (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.

36 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.

37 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.

38 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 of:
- (a) 0.97 ML per unit share is to be made for regulated river (high security) access licences in the Murray Water Source, other than those specified in subclause (1), 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,
 - (b) 1 ML per unit share is to be made for regulated river (high security) access licences in the Murray Water Source other than those specified in subclause (1), 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 provisions 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) available water determinations totalling 100% of access licence share components for both domestic and stock access licences, local water utility access licences and those subcategories of regulated river (high security) access licences specified in subclause (1), in the respective water source,
 - (d) existing water allocations in regulated river (general security) access licence water allocation accounts in the respective water source,
 - (b) 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.

39 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 that have 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 provisions 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) 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/yr, in the respective water source,
 - (d) available water determinations totalling 0.97 ML per share for regulated river (high security) access licences that have share components expressed in unit shares in the Murray Water Source,
 - (e) existing water allocations in regulated river (conveyance) access licence water allocation accounts in the Murray Water Source,
 - (f) existing water allocations in regulated river (general security) access licence water allocation accounts in the Murray Water Source,
 - (g) 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 subclauses (a) to (f) above.

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

- (1) The Minister is to assess if water is available for the making of an available water determination for regulated river (general security) access licences, at least monthly.
- (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) available water determinations totalling 100% of access licence share components for domestic and stock access licences, local water utility access licences and regulated river (high security) access licences that have share components expressed in ML/yr, in the Murray Water Source,
 - (d) available water determinations totalling 0.97 ML per share for regulated river (high security) access licences that have share components expressed in unit shares in the Murray Water Source,
 - (e) available water determinations totalling 0.5 ML per unit share for regulated river (conveyance) access licences in the Murray Water Source,
 - (f) existing water allocations in regulated river (general security) access licence water allocation accounts in the Murray Water Source,
 - (g) 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 subclauses (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) 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) available water determinations totalling 1 ML per share for regulated river (high security) access licences in the Lower Darling Water Source,
 - (f) existing water allocations in regulated river (general security) access licence water allocation accounts in the Lower Darling Water Source,
 - (g) 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 subclauses (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 under subclause (2) or (3) that water is available, 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 56 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 59 (2) has been re-credited to the Allowance under clause 58 (2).

41 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 34.

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

42 Available water determinations for River Murray increased flows access licences

- (1) Unless the Minister otherwise determines, an available water determination is to be made for River Murray increased flows access licences whenever the Murray-Darling Basin Authority notifies the Minister that additional water is available in NSW's share of Hume Reservoir for allocation to River Murray increased flows access licences, as determined in accordance with the Strategy referred to in clause 20 of Schedule F of the Murray-Darling Basin Agreement.
- (2) Unless the Minister otherwise determines, the available water determination made under subclause (1) is to be equal to:

$A/35,000$

where A is the volume of water the Murray Darling Basin Authority notifies is available for allocation under subclause (1).

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Part 7 Rules for granting access licences

Notes.

- 1 This Part is made in accordance with sections 20 (2) (b), 61 and 63 of the Act.
- 2 Access licences granted in the water sources will be subject to mandatory conditions imposed by this Plan, the regulations and the Act, and may also be subject to discretionary conditions.

43 Rules for granting access licences

Note. Section 61 of the Act provides for the granting of specific purpose access licences under the regulations and the relevant water sharing plan.

- (1) 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.
- (2) 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.

- (3) 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.

Part 8 Rules for operating water accounts and managing access licences

Note. Section 85 of the Act provides 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.

Division 1 General water allocation account management rules

44 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 the water allocation account the volume of water extracted by the water supply works nominated by the access licence, except where subclauses (2), (4), and (5), or clause 47 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 may debit the greater of the following from the account, except where clause 47 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 account.
- (4) The water allocation taken under an access licence that orders water in accordance with the environmental flow reuse procedures for the water sources will be assessed and debited as the amount of water ordered.
- (5) The water allocation taken under an access licence that orders water in accordance with the piggybacking procedures for the water source will be assessed and debited as the amount of water ordered, 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 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 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.

45 Limits on water allocation accounts and carryover

- (1) The Minister must not carry over water allocations remaining in the water allocation account from one water year to the next water year for the following categories of licence:
 - (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) The Minister must carry over water allocations remaining in the water allocation account 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,
 - (c) River Murray increased flows access licences.

46 Withdrawals from water allocation accounts for evaporation and dam spills

- (1) In relation to the River Murray increased flows access licence water allocation account in the Murray Water Source, the Minister is to withdraw an amount for water spills from Hume Reservoir that is equal to the lesser of the following:

- (a) the amount of water in the River Murray increased flows access licence water allocation account,
 - (b) NSW's share of the water spilt from Hume Reservoir.
- (2) 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 45 (2) (b), over an assessment period determined by the Minister.
- (3) The amount the Minister is to withdraw under subclause (2) from each water allocation account is the lesser of:
- (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).
- (4) 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.
- (5) The amount the Minister is to withdraw under subclause (4) from each water allocation account is the lesser of:
- (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.

47 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 account of that licence, 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,
 - (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.

48 Taking of water under supplementary water access licences

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

49 Announcement of supplementary water event

- (1) The Minister may announce a supplementary water event in the water sources, or part of the water sources if, in the Minister's opinion, there will be uncontrolled flows in that water source or part thereof.
- (2) The Minister must not announce a supplementary water event in the water sources if, in the Minister's opinion:
 - (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 sections 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.

Part 9 Access licence dealing rules

Notes.

- 1 Access licence dealings in the water source are subject to the provisions of the Act, the regulations, any access licence dealing principles established by order made under section 71A of the Act and the access licence dealing rules established under this Part.
- 2 As at 1 July 2019 the *Access Licence Dealing Principles Order 2004* applies. The access licence dealing principles prevail over the access licence dealing rules in this Plan to the extent of any inconsistency, as provided under section 71Z (3) of the Act.
- 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.

50 Conversion of access licence to new category

Dealings under section 71O of the Act are prohibited.

Minister's Note.

The Department of Planning, Industry and Environment– Water is considering an option to allow limited conversion of regulated river (high security) access licences to access licences in connected upstream unregulated river water sources. This would enable some additional water to be taken in upstream areas without affecting water availability in the downstream storage/s, but may need to be subject to an assessment of potential local impacts of any such trade on the environment and access to water by other water users, and may be limited in scope.

This is a new concept that is yet to be discussed with stakeholders (including the Stakeholder Advisory Panel). As such, no provisions to facilitate it have been included within this draft amended plan. If pursued, new provisions will need to be incorporated into the Plan.

51 Assignment of rights dealings (within the water sources)

Notes.

- 1 In some segments of the water sources, the ability to deliver water is limited by supply constraints. In these segments, this clause prohibits dealings that would increase the total share components of access licences in those segments above 2004 amounts, until individual daily extraction components are imposed on each licence in that segment, under the Act.
- 2 This clause may be amended once individual daily extraction components are imposed on licences within each segment of the water sources referred to in subclause (1).

- (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,
 - (d) involves a River Murray increased flow access licence.
- (2) A dealing under section 71Q of the Act that is from or to an access licence in another water source is prohibited.

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

Dealings under section 71R of the Act are prohibited.

53 Assignment of water allocations 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 from an access licence in one of the water sources to an access licence in another water source unless the water source is:
 - (i) the Murrumbidgee Regulated River Water Source,
 - (ii) the other one of the water sources,
- (c) the dealing involves an assignment of water allocation to an access licence in one of the water sources from an access licence in another water source unless the water source is:
 - (i) the Murrumbidgee Regulated River Water Source,
 - (ii) the other one of the water sources,

- (d) 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,
- (e) the dealing involves an assignment of water allocation to a supplementary water access licence from an access licence of any other category,

Note. As at 1 July 2019, 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*.
- (f) the dealing would comply with the requirements of subclause (b) or (c), but in the Minister's opinion, the supply of the volume of water allocation to the receiving access licence is not physically possible,
- (g) the dealing would comply with subclause (b) or (c), but in the Minister's opinion, there is more than minimal likelihood that the reliability of environmental water available under Division 1 or 2 of Part 10, supply to basic landholder rights and all access licences in either of the water sources will be reduced,
- (h) the dealing would comply with subclause (b) or (c) but not with the Inter-Valley Trade Procedures established by the Minister,
- (i) the dealing involves an assignment of water allocation to or from a River Murray increased flows access licence.

54 Interstate access licence transfer and assignment of water allocations

- (1) Dealings under section 71U of the Act are prohibited unless administrative arrangements have been put in place by the States and the interstate transfer of access licence is to be made in accordance with these arrangements.
- (2) Dealings under section 71V of the Act are prohibited unless the dealing is in accordance with 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 the dealing involves any of the following access licences:
 - (a) regulated river (conveyance) access licence WAL9422,

- (b) regulated river (high security) access licence WAL9423,
- (c) a River Murray increased flows access licence.

55 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,

Part 10 System operation rules

Notes

- 1 The approximate location of the places referred to in this Part are in the overview map at Appendix 1.
- 2 **Operator** and **NSW Environmental Water Manager** are defined in the Dictionary.
- 3 At the commencement of this Plan, the NSW Office of Environment and Heritage (OEH) is responsible for managing environmental water allowances established under NSW water sharing plans. OEH also administers and supports Environmental Water Advisory Groups (EWAGs) to inform the management of environmental water allowances and licensed environmental water, including providing advice to the Minister. Information on EWAGs is available from OEH's website at www.environment.nsw.gov.au.

Division 1 Environmental water rules in the Murray Water Source

56 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) exceptional circumstances 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.

57 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 Operating Rules for the Barmah-Millewa Forest Environmental Watering Allocation (B-MF EWA), MDBC Technical report 2006/13, July 2006, as updated. The rules in this Division outline NSW's obligations in the management of the 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).

58 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 the first instance between 1 July and 1 December 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 59 (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 59 (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 59 (2).

59 Debits from the Barmah-Millewa Allowance

- (1) If the operator makes a credit to the Barmah-Millewa Allowance under clause 58 (1) (b) following the trigger for 1 July being reached but the trigger for 1 August as specified in clause 58 (1) (b) is not reached, then any volume credited for July in the Barmah-Millewa Allowance must be debited from the allowance after 1 August.
- (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 60, 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.

60 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 developed by the Minister and published on the Department's website.

- (2) Unless the operator otherwise determines, the operator is to make releases from the Barmah-Millewa Allowance at the request of the Environmental Water Manager.
- (3) Water may 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.

61 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 from the Allowance, NSW's share of evaporation losses as calculated under the Barmah-Millewa operating rules.

62 Barmah-Millewa Overdraw

- (1) When the sum of available water determinations for regulated river (general security) access licences in the water year reaches 1 ML per unit share and there is sufficient water set aside for the making of an available water determination of 0.97 ML per unit share for regulated river (high security) access licences at the commencement of the following water year, the Minister may direct the operator to credit the Barmah-Millewa Overdraw with any available water, as long as the amount in the Barmah-Millewa Overdraw does not exceed 50,000 ML.
- (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 protocols developed by the Minister and published on the Department's website.
- (3) Unless the operator otherwise determines, the operator is to make releases from the Barmah-Millewa Allowance at the request of the Environmental Water Manager.
- (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.

63 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 that have share components expressed in unit shares, whenever the sum of available water determinations for those access licences in the water year has reached 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 express 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 that have 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) Unless the operator otherwise determines, the operator is to make releases from the Murray Additional Allowance at the request of the Environmental Water Manager.
- (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.

64 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 access licence under clause 46 (1), 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 access licence under clause 46 (1).
- (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 60 (2), up to 100,000 ML.

Division 2 Environmental water rules in the Lower Darling Water Source

65 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 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) Unless the operator otherwise determines, 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

66 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, or both, and consider any relevant advice, before taking action under this Part.

Notes. As at 1 July 2019, the Minister has delegated the lead role in managing environmental water allowances established under water sharing plans to the NSW Office of Environment and Heritage (OEH). OEH 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 OEH's website at www.environment.nsw.gov.au.

Division 4 General system operation rules

67 Maintenance of water supply

- (1) 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 worst drought, 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 that have 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 licence of 1 ML per unit share.
- (2) In this clause, *worst drought* means the worst period of low inflows into the water source, as identified in flow information held by the Department before 1 July 2004.

68 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 source in accordance with procedures established by the Minister, taking into account each of 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,

Note. Transmission losses is defined in the Dictionary.

- (d) the capacities of structures in the water supply system.

(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, whether or not the order is in accordance with the Inter-Valley Trading Procedures established by the Minister.

Note. Tagged trade is defined in the Dictionary.

69 Priority of extraction for access licences and delivery of EWAs

(1) This clause does not apply to supplementary water access licences.

(2) If supply capability in any segment of the water source is insufficient 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,
- (c) once the requirements in (b) have been met, unless otherwise directed by the Minister, any remaining supply capability is to be shared between regulated river (high security) access licences, regulated river (conveyance) access licences, regulated river (general security) access licences that have placed an order for water and EWA water deliveries that have been requested, in accordance with a method determined by the operator in consultation with the NSW Environmental Water Manager.

(3) The operator is to consult with water user representatives and relevant government agencies, as the Minister considers appropriate, before determining the method in subclause (2) (c).

- (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.

70 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.

71 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.

72 Environmental flow reuse and piggybacking operation rules

- (1) The Minister may make a pre-requisite policy measures (PPM) procedures manual 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) in the water sources.
- (2) Access licences that are either licensed environmental water under section 8 of the Act, or are held by the Commonwealth Environmental Water Holder, or are specified in the PPM procedures manual (being under which, in the opinion of the Minister, water is to be used for environmental purposes only) may order water under the environmental flow reuse procedures or the piggybacking procedures established for the water sources.

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) Water orders made under the piggybacking procedures may request water be delivered from a particular water storage in the water sources.
- (4) The water delivered for each order made under subclause (2) is to be determined in accordance with the environmental flow reuse procedures and the piggybacking procedures established for the water sources.
- (5) The water supply system is to be managed in accordance with the environmental flow reuse procedures and the piggybacking procedures for the water sources.

73 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 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 can 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,
 - (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.

Minister's note

The Department of Planning, Industry and Environment – Water is considering a proposal create a Lower Darling Restart Allowance, for the purpose of mitigating impacts to water quality in refuge pools when the Lower Darling River has ceased to flow and is then re-started. This water accounting measure will enable an initial pulse release, so that normal regulated flows can safely resume.

The Allowance will be triggered once the Lower Darling River at Weir 32 (GS 425012), near Menindee, ceases to flow for at least 10 consecutive days. It will be credited with up to 60 giganlitres (GL) of 'operational' water. It is important to note that the 60 GL will become available from future replenishment inflows, not from existing reserves in storage.

The decision to re-start the river will be based on imminent inflows sufficient to flush and re-start the river and to run the regulated seasonal minimum flows into the foreseeable future (e.g. one year or longer).

This concept has been favourably received by stakeholders (including the NSW Murray and Lower Darling Stakeholder Advisory Panel) and is now included within this draft amended plan, for additional stakeholder consultation and feedback before the proposal is formally considered.

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Part 11 Mandatory conditions

Division 1 General

74 Requirement to notify

In this Part, a requirement to notify the Minister in writing will only be satisfied by writing to the address listed in Schedule 1 of this Plan or to the email address for enquiries on the Department's website.

Note. As at 1 July 2019, the email address for enquiries on the Department's website is water.enquiries@dpi.nsw.gov.au.

Division 2 Access licences

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 this notification in writing within seven days of becoming aware of the breach,
 - (b) extraction under the access licence is subject to the relevant available water determinations,
 - (c) the taking of water in accordance with the access licence may only occur if the resulting debit to the access licence account does not exceed the volume of water allocation remaining in the licence account, except in accordance with an order made under clause 47 that permits the taking of uncontrolled flows by regulated river (general security) access licences.
- (2) Each access licence, other than a supplementary water access licence, must have mandatory conditions requiring that the licence holder must not take water unless it has been ordered in accordance with procedures established by the Minister.
- (3) Each domestic and stock access licence must have a mandatory condition that water may only be taken for the purpose of domestic consumption or stock watering as defined in section 52 of the Act.
- (4) Each regulated river (general security) access licence must have a mandatory condition that gives effect to the licence holder being able to only take the water available in the water allocation account for the licence, except in accordance with an order made under

clause 45 that permits the taking of uncontrolled flows by regulated river (general security) access licences.

- (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 any order made by the Minister under clause 47.
- (6) Each supplementary water access licence must have a mandatory condition that gives effect to Division 3 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

Each water supply work approval must have mandatory conditions to give effect to the following:

- (a) The water supply work must not be used to take water under an access licence unless in compliance with the relevant access rules for the taking of water as specified in Part 8.
- (b) The approval holder, upon becoming aware of a breach of any condition of the approval, must:
 - (i) notify the Minister as soon as practicable, and
 - (ii) if the notification under subclause (a) was not in writing, confirm this notification in writing within seven days of becoming aware of the breach.
- (c) Flow measurement devices must be installed and maintained on all 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.
- (d) 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.
- (e) 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.

- (f) Subclauses (c) to (e) do not apply to approvals for water supply works held by WaterNSW provided the approval is not nominated by an access licence.

Part 12 Amendment of this Plan

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

77 General

- (1) An amendment authorised by the Plan is taken to include any consequential amendments required to be made to this Plan to give effect to that particular amendment.

Note. For example, if Part 1 is amended to add a new management zone, this may require amendments to other parts of this Plan to include rules for that management zone.

- (2) Consequential amendments may be made to this Plan as a result of an amendment to the Act or regulations.

78 Amendments relating to Part 1

Part 1 may be amended to add, modify or remove a river or section of river to or from the water source 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 environmental water, or on the available water to any access licence in the water source.

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 72.
- (b) environmental flow reuse and piggybacking operation rules in clause 72.

80 Amendment of Plan relating to floodplain harvesting

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

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 Schedules

Schedule 1 may be amended to add or remove an office.

85 Effect of certain amendments to this Plan

- (1) A reference to a repealed provision of this Plan extends to the corresponding provision of the amended plan, as the case may be.
- (2) If a provision is omitted and replaced or reinserted by an amendment to this Plan, the omission and the replacement does not affect the operation (if any) or meaning of the provision, and accordingly the provision is to be construed as if it had not been omitted and replaced.
- (3) Subclause (2) applies whether or not the provision is modified but has effect subject to any such modification.

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Dictionary

Aboriginal person has the same meaning as under 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.

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

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

carbon and nutrient pathways means the connected networks of streams, riparian zones, floodplains and wetlands that transport dissolved and suspended organic material and nutrients to support ecosystems.

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

flow regimes mean, collectively, the magnitudes, durations, frequency 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.

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 with the conservation role for water-dependent assets. This responsibility extends to managing the NSW environmental water portfolio.

Note. As at 1 July 2019, the NSW Environmental Water Manager is the NSW Office of Environment and Heritage.

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

Note. As at 1 July 2019, 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.

Snowy Mountains Hydroelectric Scheme means the works, activities and other things declared to be the 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 source.

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

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 the specified delivery point.

uncontrolled flow 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 source 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 source, and the management practices that are applied in relation to them.

water year means a period of 12 months commencing on 1 July and ending on 30 June.

weighted average price means the total price (dollars per ML) of all units sold divided by the number of units sold.

Schedule 1 Offices (clause 74)

Department of Planning, Industry and Environment – Water

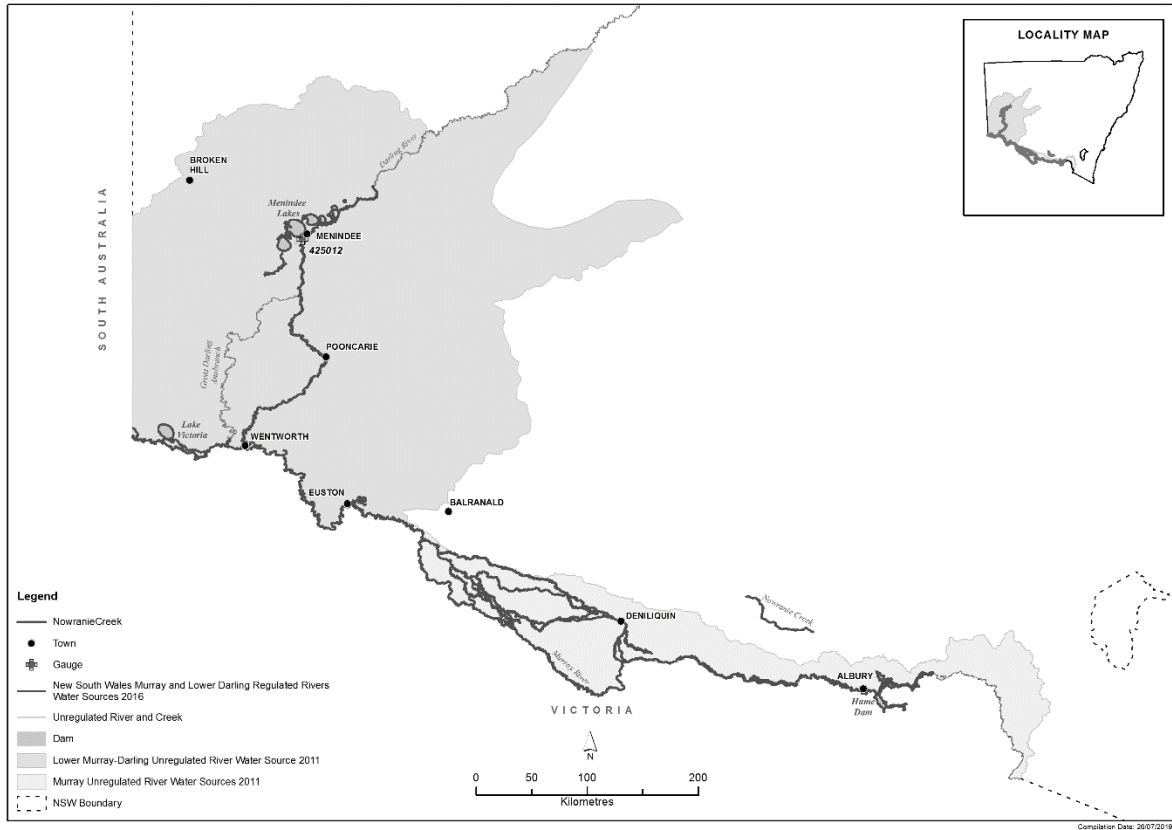
Level 10, Macquarie Tower

Locked Bag 5123

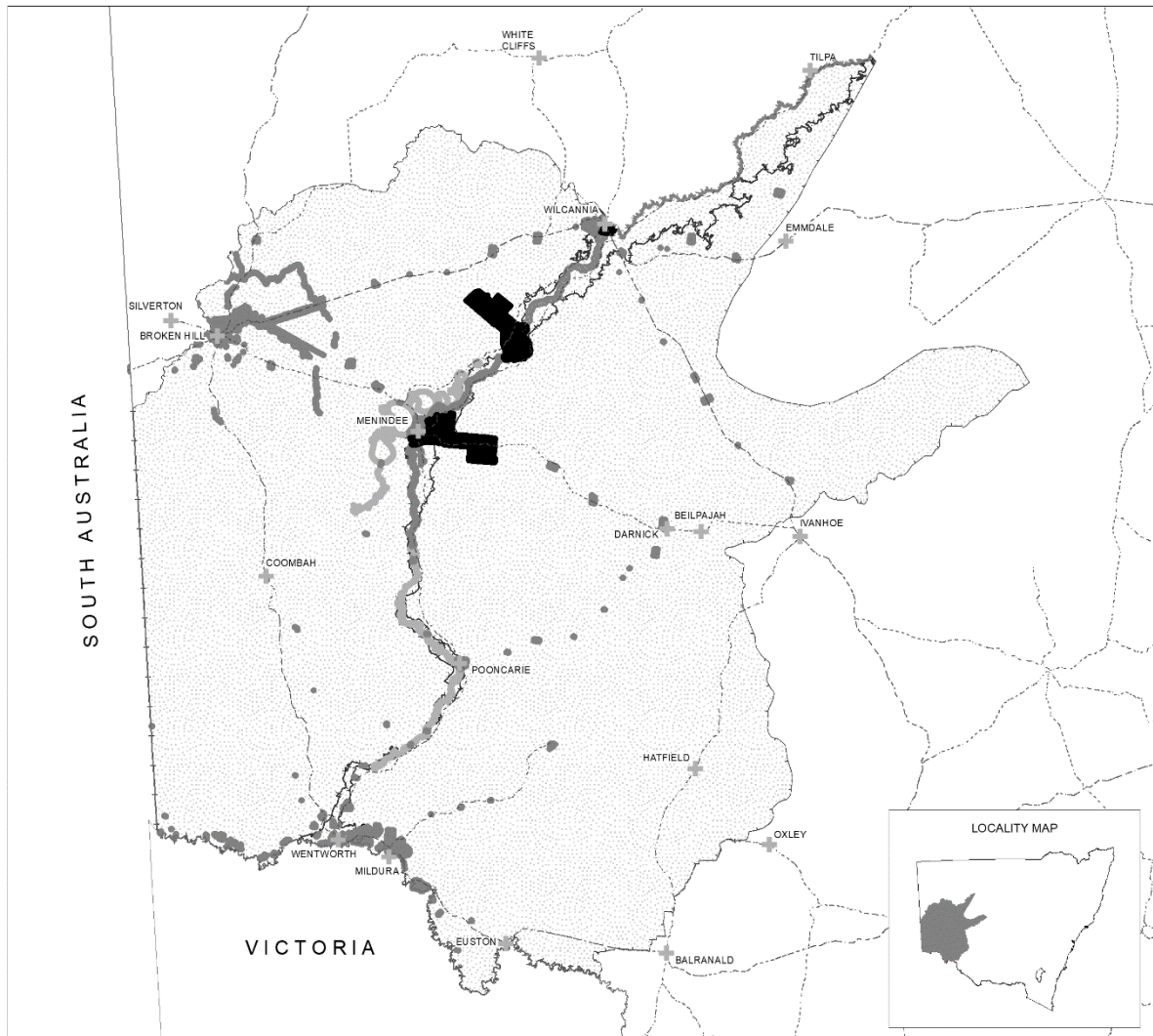
Parramatta NSW 2124

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



Appendix 2 Locations covered by a native title determination in relation to the Lower Darling Water Source



- Legend**
- ⊕ Towns
 - Lower-Darling Regulated River Water Source
 - Highways
 - ⋯ Major Roads
 - ⊔ Lower Murray-Darling Unregulated and Alluvial Water Sources
 - Native title exists (exclusive)
 - Native title exists (non-exclusive)

