Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2016 (amended 2019)

Contents

Part 1	Introduction	3
Part 2	Vision, objectives, strategies and performance indicators	6
Part 3	Bulk access regime	17
Part 4	Environmental water provisions	19
Part 5	Requirements for water	
Division 1	General	21
Division 2	Requirements for water for basic landholder rights	21
Division 3	Requirements for water under access licences	
Part 6	Limits to the availability of water	
Division 1	Calculations under this Part	
Division 2	Long-term average annual extraction limit	25
Division 3	Long-term average sustainable diversion limit	27
Division 4	Compliance with extraction and diversion limits	28
Division 5	Available water determinations	29
Part 7	Rules for granting access licences	34
Part 8	Operation of water allocation accounts and managing access licences	35
Division 1	Accounting for water allocation accounts	35
Division 2	Supplementary water events	37
Part 9	Access licence dealing rules	39
Part 10	System operation rules	44
Division 1	Environmental flow rules for the water source	44
Division 2	Environmental water allowance rules	48
Division 3	Provisional storage volumes	51
Division 4	Consultation	52
Division 5	General system operation rules	52
Part 11	Mandatory conditions	56

Division 1	General	56
Division 2	Access licences	56
Division 3	Water supply work approvals	57
Part 12	Amendment of this Plan	59
Dictionary		61
Schedule 1	Yanco System	63
Schedule 2	Burrinjuck Dam translucency percentage table	65
Schedule 3	Goodradigbee flow classification table	69
Schedule 4	Initial "unclipped" translucency percentage table	73
Appendix 1	Overview map of the Murrumbidgee Regulated River Water Source	77

Part 1 Introduction

Notes.

- 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.
- 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.
- The Minister may amend this Plan at any time under section 45 of the *Water Management Act 2000*, including if satisfied it is in the public interest to do so, or in such circumstances, in relation to such matters and to such extent as Part 12 provides.

1 Name of Plan

This Plan is the Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2016 (this Plan).

2 Nature and status of Plan

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

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

3 Commencement

This Plan commences on 1 July 2016.

Notes.

- 1 This Plan replaces the Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2016.

- 4 **Basin Plan** is defined in the Dictionary.

4 Application of Plan

(1) This Plan applies to the Murrumbidgee Regulated River Water Source within the Murrumbidgee Water Management Area and the Murray Water Management Area (*the water source*).

Note. The Murrumbidgee Water Management Area and the Murray Water Management Area were 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) Subject to subclause (3), the water in the water source consists of:

- (a) the water between the banks of all rivers and parts of rivers, from Burrinjuck Dam water storage and Blowering Dam water storage downstream to the junction of Billabong Creek and the Edward River, and the junction of the Murrumbidgee River and the Murray River, that have been declared by the Minister to be a regulated river, and
- (b) the water occurring naturally on the surface of the ground or in rivers, lakes and wetlands in the area marked as Lowbidgee shown on the Plan Map called *Plan Map (WSP027_Version 2), Lowbidgee of the Murrumbidgee Regulated River Water Source 2019 (the Plan Map)* held by the Department.

Notes.

- The Murrumbidgee Water Management Area Regulated River Order was made by the Minister and published in the New South Wales Government Gazette No 110 on 1 July 2004 at page 5490, and amended in 2018 as set out in item [21] of Schedule 12 of the Act. An overview map of the regulated rivers, as amended, is at Appendix 1.
- An overview of the Plan Map (WSP027_Version 2), Lowbidgee of the Murrumbidgee Regulated River Water Source is in Appendix 2. The Plan Map is published on the NSW legislation website.
- (3) The water source does not include water in the following:
 - (a) Pee Vee Creek,
 - (b) Lake Tala,
 - (c) Five Mile Lagoon.

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 clause that applies to a category of access licence also applies to any subcategories of that category of access licence.
- (4) The Dictionary and Schedules to this Plan form part of this Plan.
- (5) The Plan Map forms part of this Plan.
- (6) A number in brackets following the name of a gauge is the gauge number.
- (7) A reference to a supplementary water access licence does not include a supplementary water (Lowbidgee) access licence.
 - **Note.** Supplementary water (Lowbidgee) access licences are a subcategory of supplementary water access licences. However, they are identified separately in this Plan as different provisions apply to these access licences.
- (8) Notes in the text of this Plan do not form part of this Plan.

(9) 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 Departments 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 Murrumbidgee 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 Murrumbidgee Water Management Area and Murray 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 source and its water dependent ecosystems (instream, riparian and floodplain ecosystems) over the term of this Plan.

Notes.

- 1 **Broad objective** is defined in the Dictionary.
- The ecological condition of the water source includes high ecological value aquatic ecosystems, target species, communities, populations and key ecosystem functions as defined in the Murrumbidgee Long Term Water Plan and the Murrumbidgee 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, flatheaded galaxias, southern pygmy perch, trout cod, silver perch and Macquarie 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, and the associated ecological communities such as waterbirds and lignum, are primarily managed by the Environmental Watering Advisory Group according to the conditions of this Plan. The targeted objectives, management and monitoring activities for these assets and communities are provided in the Murrumbidgee Long Term Water Plan, the Environmental Watering Advisory Group 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 stream, 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 Murrumbidgee Unregulated River Water Sources 2012, the Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated River Water Sources 2016 or the Water Sharing Plan for the Murray Unregulated Water Sources 2011.
- (iii) water quality within target ranges for the water source to support water dependent ecosystems and ecosystem functions,

Notes. Water quality targets for the water source are defined in the Water Quality Management Plan SW9 Murrumbidgee Water Resource Plan Area 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.

Notes.

Part 10 outlines the provisions for Environmental Water Allowances (EWAs). The NSW Environmental Water Holder makes decisions about the use of EWA water on any advice of an Environmental Watering Advisory Group according to the rules in this Plan.

- The objectives and strategies of environmental watering events are guided by the Murrumbidgee Long Term Water Plan and may also contribute to the broad and targeted environmental objectives of this Plan.
- (3) The strategies for reaching the targeted environmental objectives of this Plan are as follows:
 - (a) reserve all water in excess of the long-term average annual extraction limit and the long-term average sustainable diversion limit for the environment,
 - **Note.** Part 3 of this Plan reserves all water remaining above the long-term average annual extraction limit and long-term average sustainable diversion limit for the environment.
 - (b) reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in the water source,

Notes.

- 1 Flow regimes is defined in the Dictionary.
- The provisions in clauses 58 60 partially mitigate the alterations to low flows in the natural flow regimes of the water source. These provisions contribute to the objectives in subclauses (2) (a) (i) (ii) and (iv) and (b).
- (c) 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 58 60 contribute to maintaining the hydrological connectivity between the water source and connected wetlands by ensuring a portion of natural flows are protected.
- (d) reserve a share of water to support environmental watering events in streams, riparian zones, floodplains and wetlands connected to the water source,
 - **Note.** The provisions in Part 10 ensure that environmental water allowances are maintained.
- (e) contribute to critical environmental and water quality events in downstream connected water sources.

Notes.

- Downstream connected water sources may include the water sources covered by the following plans:
 - (a) Water Sharing Plan for the Murrumbidgee Unregulated River Water Sources 2012.
 - (b) Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated River Water Sources 2016,
 - (c) Water Sharing Plan for the Murray Unregulated Water Sources 2011.
- The provisions in clause 58 provide connectivity between this water source and downstream connected water sources by ensuring a minimum flow is maintained at the end of this water source.
- The provisions in clause 48 regulate the announcement of supplementary water events which may be used to provide connectivity between the water source and downstream connected water sources.
- 4 EWAs established in Part 10 may also be used to provide connectivity between the water source and downstream connected water sources.
- (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 the 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.
- (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) maintain and, where possible improve, water trading opportunities for waterdependent economic activities,

Note. Trading is a generic term referring to dealings under Division 4 of Part 2 of Chapter 3 the Act.

- (b) maintain or enhance access to water, up to the extraction limit, for agriculture, business and landholders,
- (c) contribute to maintaining water quality within target ranges for agriculture, business and landholders.

Note. Water quality target ranges for this water source are defined in the Water Quality Management Plan SW9 Murrumbidgee Water Resource Plan Area and the NSW State Water Quality Assessment and Monitoring Plan.

- (3) The strategies for reaching the targeted economic objectives of this Plan are as follows:
 - (a) 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 73 provide certainty in how water is to be shared between individual access licence holders and different categories of access licences. These provisions contribute to the objectives in subclause (2) (b).

(b) provide for flexibility of access to water,

Note. The individual account management rules in Part 8 provide flexibility that reflects the characteristics of the licence category. These provisions contribute to the objective in subclause (2) (b).

(c) manage extractions to the long-term average annual extraction limit and the long-term average sustainable diversion limit, and provide 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 provisions in Part 6 manage extractions to different climatic conditions in different years.

(d) provide for trade of water allocations and entitlements within the water source, subject to environmental and system constraints,

Note. The provisions in Part 9 permit a variety of dealings within environmental and system constraints, including assignment of rights under access licences and assignment of water allocations between access licences. These provisions contribute to the objectives in subclauses (2) (a) and (b).

(e) provide for supplementary water access, subject to announcements, to a portion of uncontrolled flows,

Note. The provisions in clause 48 describe the access conditions during supplementary water events. These provisions contribute to the objective in subclause (2) (b).

(f) reserve a portion of natural flows to partially mitigate deterioration in water quality due to alterations to natural flow regimes.

Notes.

- 1 **Flow regimes** is defined in the Dictionary.
- 2 The provisions in 58 60 partially mitigate the alterations to low flows in the natural flow regime of this water source. These provisions contribute to the objective in subclause (2) (c).

- (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 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 and trends in the following:
 - (i) the change in the unit price of water that is subject to a dealing,
 - (ii) the annual total volume 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 absorption ratio, harmful algal blooms, total nitrogen, total phosphorous, pH, water temperature and dissolved oxygen.
- (6) In evaluating the effectiveness of the strategies in meeting the objectives of this clause, the following will be relevant:
 - (a) the extent to which 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 determination and 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) provide access to water in the exercise of native title rights,
 - (b) provide access to water for Aboriginal cultural use, including fishing,
 Note. Relevant native fish species in this water source may include golden perch and Murray cod.
 - (c) protect and, where possible enhance, identified water-dependent culturally significant areas, including important riparian vegetation communities,
 - (d) contribute to maintaining water quality within target ranges to ensure suitability of water for Aboriginal cultural use.
 - **Note.**Water quality target ranges for this water source are defined in the Water Quality Management Plan SW9 Murrumbidgee Water Resource Plan Area and the NSW State Water Quality Assessment and Monitoring Plan
- (3) The strategies for reaching the targeted Aboriginal cultural objectives of this Plan are the following:
 - (a) manage access to water consistently with the exercise of native title rights,
 - **Note.** Clause 19 of this Plan ensures the provision of water associated with native title determination. These provisions contribute to the objective in subclause (2) (a).
 - (b) provide for water associated with Aboriginal cultural values and uses,
 - **Note.** The provisions in Part 7 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 provision contributes to the objective in subclause (2) (b).
 - (c) reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in the water source,
 - **Note.** The provisions in clause 58 60 partially mitigate the alterations to low flows in the natural flow regime of this water source. These provisions contribute to the objective in subclause (2) (c).
 - (d) 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 58-60 contribute to maintaining the hydrological connectivity between this water source and wetlands connected to this water source by ensuring a portion of low flows are protected. These provisions contribute to the objectives in subclause (2) (c) and (d).
 - (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 allowance, rates of change to storage releases, supply of orders when remaining allocations are low and dam operation during floods and spills in Part 10 minimise the impact of water delivery on the community.
- (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 reaching 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:
 - (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 Aboriginal people have considered the operation of this Plan to be beneficial to meeting their needs for water-dependent Aboriginal cultural uses and values,
 - (f) 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,
 - (g) 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.
- (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 objective of this Plan is to maintain and, where possible, enhance the efficient and sustainable access to water to support critical human needs, and water-dependent 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 fish species that are important for recreational fishing 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 target ranges for this water source are defined in the Water Quality Management Plan SW9 Murrumbidgee Water Resource Plan Area and the NSW State Water Quality Assessment and Monitoring Plan.

- (3) The strategies for reaching the targeted social and cultural objectives of this Plan are as follows:
 - (a) provide water access for critical human needs, town water supply, and for domestic and stock purposes,

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

- (b) reserve a portion of natural flows to partially mitigate alterations to natural flow regimes in this water source,
 - **Note.** The provisions in 58 60 partially mitigate the alterations to low flows in the natural flow regime of this water source by ensuring a portion of are protected. These provisions contribute to the objective in subclause (2) (b).
- (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.

Note. The provisions in clause 58 - 60 contribute to maintaining the hydrological connectivity between this water source and wetlands connected to this water source by

- ensuring a portion of natural flows are protected. These provisions contribute to the objective in subclause (2) (c).
- (d) minimise adverse impacts of water delivery on community 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 Part 10 of this Plan minimise the impact of water delivery on the community.
- (4) The performance indicators used to measure success in achieving the broad social and cultural objectives 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 achieving 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:
 - (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) 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 the 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 this water source having regard to the following:
 - (a) the planned environmental water established under Part 4,
 - (b) the requirements for water to satisfy basic landholder rights identified under Part 5,
 - (c) the requirements for water for extraction under access licences identified under Part 5.
 - (d) the access licence dealing 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, and
 - (ii) available water determinations are to be made as provided for in Part 6, and
 - (iii) access licences are managed as provided for in Part 8, and
 - (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 source 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 flow provisions specified in Part 10,

Note. The provisions in Part 10 establish minimum daily flow rules for a number of sites in the water source and transparent release rules for Blowering Dam, and transparent and translucent release rules Burrinjuck Dam.

- the environmental water allowance provisions specified in Part 10,
 Note. The provisions in Part 10 establish three environmental water allowances which can be used to make releases for environmental purposes in the water
- the long-term average annual commitment of water as planned environmental
- (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) the water remaining after water has been taken under basic landholder rights, access licences and any other rights under the Act in accordance with the provisions in Part 6 and Part 8.
- (2) The planned environmental water established under subclause (1) (a) is maintained by the environmental water allowance and release provisions in Part 10.

- (3) The planned environmental water established under subclause (1) (b) is maintained by the provisions specified in Part 6.
- (4) The planned environmental water established under subclause (1) (c) is maintained by the provisions specified in Part 6 and Part 8.

Note. The provisions in Part 6 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 for basic landholder rights (Division 2) and for extraction under access licences (Division 3) in the water source.
- (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 source.
- (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 source may change during the term of this Plan as a result of:
 - (a) the grant, surrender or cancellation of access licences in the water source, or
 - (b) the variation of local water utility licences under section 66 of the Act.
- 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 that manage the sharing of water within the limits of water availability.
- 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 2004, 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 source 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 1,690 megalitres per year (*ML/year*).

Notes.

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.
- 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* (Cth), including any determination of native title.

Notes.

- 1 This Plan may be amended if there is a native title determination in accordance with the Native Title Act 1993 (Cth) by which water is required.
- Native title rights may be exercised in accordance with the Native Title Act 1993 (Cth), including section 211 of that Act.

Division 3 Requirements for water under access licences

Notes.

- 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 Industry provides a record of licensed environmental water, as well as other water intended to be used for environmental purposes.
- As at 1 July 2019, the licensed environmental water referred to in Note 1 comprises one access licence with adaptive environmental water conditions totalling 1,111.5 unit shares.
- As at 1 July 2019, there are 14 other access licences with share components totalling 173,531.5 unit shares 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.
- 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 from year to year 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 35,041 ML/year.

21 Share components of local water utility access licences

As at 1 July 2019, the share components of local water utility access licences total 23,816 ML/year.

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

As at 1 July 2019, the share components of regulated river (high security) access licences total 382,516 unit shares.

Note. The following subcategories of regulated river (high security) access licences are included in the total 382,516 unit shares:

- (a) 2,150 unit shares of Aboriginal cultural access licences,
- (b) 19,769 unit shares of Town Water Supply access licences,
- (c) 300 unit shares of Research access licences.

23 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 1,891,815 unit shares.

24 Share components of regulated river (conveyance) access licences

As at 1 July 2019, the share components of the regulated river (conveyance) access licences total 2,968 unit shares.

Note. These access licences and the associated available water determinations in clause 41 provide for conveyance losses experienced as regulated river (general security) access licence allocations increase.

25 Share components of Murrumbidgee Irrigation (conveyance) access licences

As at 1 July 2019 the share components of Murrumbidgee Irrigation (conveyance) access licences total 243,000 unit shares.

Note. These access licences and the associated available water determinations in clause 42 provide for conveyance losses that Murrumbidgee Irrigation Limited experience as regulated river (general security) access licence allocations increase.

26 Share components of Coleambally Irrigation (conveyance) access licences

As at 1 July 2019 the share components of Coleambally Irrigation (conveyance) access licences total 130,000 unit shares.

Note. These access licences and the associated available water determinations in clause 43 provide for conveyance losses that Coleambally Irrigation Co-operative Limited experience as regulated river (general security) access licence allocations increase.

27 Share components of supplementary water access licences other than supplementary water (Lowbidgee) access licences

As at 1 July 2019, the share components of supplementary water access licences, other than supplementary water (Lowbidgee) access licences, total 198,780 unit shares.

28 Share components of supplementary water (Lowbidgee) access licences

As at 1 July 2019 the share components of supplementary water (Lowbidgee) water access licences total 747,000 unit shares.

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

Division 1 Calculations under this Part

29 Exclusions, inclusions and variations in calculations

- (1) This clause applies to the calculation of the following extraction, water take and limits:
 - (a) the long-term average annual extraction limit under clause 30,
 - (b) the average annual extraction under clause 31,
 - (c) the annual permitted take under clause 34,
 - (d) the annual actual take under clause 35.
- (2) In this Part:
 - (a) Lowbidgee extraction means all extractions under the following:
 - (i) supplementary water (Lowbidgee) access licences,
 - (ii) extractions under domestic and stock rights and native title rights in the Lowbidgee, and
 - (b) *Murrumbidgee extraction* means all extractions from the water source, excluding Lowbidgee extraction.
- (3) 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 34 only, water committed as licensed environmental water under section 8F of the Act, and
 - (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.
 - (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.

- (4) The calculation by the Minister of the long-term average annual extraction limit under clause 30 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 cancelled as part of arrangements to provide additional water to the Snowy River under the Snowy Water Inquiry Outcomes Implementation Deed,
 - (b) 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

30 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 30.
- (2) The long-term average annual extraction limit is the sum of average annual Murrumbidgee extraction as calculated under subclause (3) and average annual Lowbidgee extraction as calculated under subclause (4).
- (3) Average annual Murrumbidgee extraction is equal to the lesser of the following:
 - (a) average annual extraction calculated based on the following:
 - (i) the water storages and water use development that existed in the 1999/2000 water year,
 - (ii) the basic landholder rights and access licence share components that existed on 1 July 2004,
 - (iii) the rules in the Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2003 as at 1 July 2004,
 - (iv) the level of development for plantation forestry that existed on 30 June 2009.
 - (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 Murrumbidgee Regulated River Water Source* 2003.
- (4) Average annual Lowbidgee extraction is to be 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 Murrumbidgee Regulated River Water Source* 2003.

(5) For the purposes of subclause (3) and (4) average annual extraction is to be calculated over the duration of available climate records using the hydrological computer model approved by the Minister.

Notes.

- The baseline diversion limit for the Murrumbidgee SDL resource unit as defined in Schedule 3 of the Basin Plan includes the long-term average annual extraction limit for the water source and the long-term average annual extraction limits under the *Water Sharing Plan* for *the Murrumbidgee Unregulated River Water Sources 2012*.
- The long-term average annual extraction limit has been assessed using the Murrumbidgee IQQM computer model scenario run number '50 EWA1 plus TT'. As at 1 July 2019 the long-term average annual extraction is assessed to be X,XXX,XXX ML.
- 3 Under section 8F of the Act the long-term average annual extraction limit is to be varied by any change to licensed environmental water, excluding water committed under section 8C of the Act.
- 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.

31 Calculation of average annual extraction

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 current rules in this Plan,
- (d) the level of development for plantation forestry in that water year.

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

- (1) Following the calculations under clauses 30 and 31, 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 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 30 (3) (a) and (b),
 - (b) the amount calculated under clause 30 (3) (b).

Division 3 Long-term average sustainable diversion limit

33 Calculation of the long-term average sustainable diversion limit

The long-term average sustainable diversion limit for the water source is:

- (a) the component of the baseline diversion limit for the water source within the Murrumbidgee SDL resource unit as determined under Schedule 3 of the Basin Plan, minus
- (b) 320,000 ML/year, minus
- (c) the Murrumbidgee 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.
- The long-term average sustainable diversion limit for the Murrumbidgee SDL resource unit specified in Schedule 2 of the Basin Plan covers extractions from both the Murrumbidgee Regulated River Water Source and the Murrumbidgee Unregulated River Water Sources.
- The subtraction of 320,000 ML/year and the SDL resource unit shared reduction amount is prescribed in Schedule 2 of the Basin Plan.

34 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 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.

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

- (1) Following the calculations under clauses 33 and 34 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 and diversion limits

36 Action following non-compliance

- (1) Subject to subclauses (2) to (4), if an assessment under clauses 32 or 35 demonstrates 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, other than supplementary water (Lowbidgee) access licences, under clause 44 (1) of less than 1 ML per unit share,
 - (b) make an available water determination for supplementary water (Lowbidgee) access licences under clause 44 (2) 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 37 (2).

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) An action under subclause (1) 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 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.
- (3) Unless the Minister otherwise determines, any action taken under subclause (1) is to apply to supplementary water (Lowbidgee) access licences to the extent to which the non-compliance was caused by Lowbidgee extraction.

Note. The intent of this subclause is to allow compliance action to more closely target where the growth in extractions is occurring, i.e. extractions from the Lowbidgee or from the regulated rivers in the water source.

- (4) The Minister must not take action under subclause (1) (c) unless the Minister has made an available water determination for supplementary water access licences of zero under subclause (1) (a).
- (5) Before taking action under subclause (1), 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

37 General

- (1) Available water determinations for access licences are to be expressed as one of the following:
 - (a) for an access licence specifying the share component in ML/year a percentage of the share component,
 - (b) for an access licence specifying the share component as a number of unit shares megalitres (*ML*) per unit share.
- (2) The sum of available water determinations made for any access licence must not exceed the following in any water year:
 - (a) for an access licence specifying the share component in ML/year -100% of the share component,
 - (b) for an access licence specifying the share component as a number of unit shares –1 ML per unit share of the share component.

38 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.

39 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.

40 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 licence:
 - (a) Aboriginal cultural,
 - (b) Community and education,
 - (c) Environmental,

- (d) Research,
- (e) Town water supply.
- (2) Unless the Minister otherwise determines and subject to subclause (4), at the commencement of each water year an available water determination is to be made for regulated river (high security) access licences other than those specified in subclause (1), that is the greater of:
 - (a) 0.95 ML per unit share,
 - (b) 0.01 ML per unit share more than the available water determination that is to be made for regulated river (general security) access licences at the commencement of the water year whenever that available water determination for regulated river (general security) access licences is less than 1 ML per unit share,
 - (c) 1 ML per unit share when the sum of available water determinations for regulated river (general security) access licences is equal to 1 ML per unit share.
 - **Note.** If the available water determination made for regulated river (high security) access licences at the commencement of the water year is less than 1 ML per unit share, the Minister may conduct further assessments of available water resources and may make further available water determinations subject to subclause 37 (2).
- (3) Unless the Minister otherwise determines and subject to subclause (4), if the available water determination made under subclause (2) is less than 1 ML per unit share then any additional available water determinations made for regulated river (high security) access licences other than those specified in subclause (1), is to result in the sum of available water determinations made for those licences in the water year being the greater of:
 - (a) 0.95 ML per unit share,
 - (b) 0.01 ML per unit share more than the sum of available water determinations for regulated river (general security) access licences when the sum of available water determinations for regulated river (general security) access licences is less than 1 ML per unit share,
 - (c) 1 ML per unit share when the sum of available water determinations for regulated river (general security) access licences is equal to 1 ML per unit share.
- (4) The Minister must not make an available water determination under subclause (2) and (3) unless sufficient water is available for all of the following:
 - (a) to meet the provisions in Divisions 1-3 of Part 10,
 - (b) to meet the requirements for basic landholder rights,
 - (c) available water determinations totalling 100% of access licence share components for domestic and stock access licences, local water utility access licences and those

- subcategories of regulated river (high security) access licences specified in subclause (1),
- (d) existing water allocations in regulated river (general security) access licence water allocation accounts,
- (e) 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) (e) above.

41 Available water determinations for regulated river (general security) access licences and regulated river (conveyance) 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 and regulated river (conveyance) access licences, at least monthly.
- (2) For the purposes of the assessment, water is not available unless sufficient water is available for the following:
 - (a) to meet the provisions in Divisions 1-3 of Part 10,
 - (b) to meet the requirements for basic landholder rights,
 - (c) available water determinations totalling 100% of access licence share components for domestic and stock access licences, local water utility access licences, and those subcategories of regulated river (high security) access licences specified in clause 40 (1),
 - (d) available water determinations for regulated river (high security) access licences other than those specified in clause 40 (1), that are made under clause 40,
 - (e) available water determinations made for Murrumbidgee Irrigation (conveyance) access licences under clause 42,
 - (f) available water determinations made for Coleambally Irrigation (conveyance) access licences under clause 43,
 - (g) existing water allocations in regulated river (general security) access licence and regulated river (conveyance) access licence water allocation accounts, and
 - (h) 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 (g) above.

(3) If the Minister assesses under subclause (1) that water is available, the Minister is to consider making the same available water determinations (in ML per unit share) for regulated river (general security) access licences and regulated river (conveyance) access licences.

42 Available water determinations for Murrumbidgee Irrigation (conveyance) access licences

Unless the Minister otherwise determines, available water determinations for Murrumbidgee Irrigation (conveyance) access licences are to be made throughout the water year to provide a total volume of water allocations as follows:

- (a) 98,000 ML plus 550 ML for each 0.01 ML per unit share of available water determination made for regulated river (high security) access licences when the sum of available water determinations for regulated river (high security) access licences for the water year is less than or equal to 0.95 ML per unit share,
- (b) 150,250 plus 550 ML for each 0.01 ML per unit share of available water determination made for regulated river (general security) access licences when the sum of available water determinations for regulated river (general security) access licences for the water year is less than or equal to 0.2 ML per unit share,
- (c) 161,250 plus 1,650 ML for each 0.01 ML per unit share of available water determination made for regulated river (general security) access licences when the sum of available water determinations for regulated river (general security) access licences for the water year is greater than 0.2 ML per unit share and less than or equal to 0.5 ML per unit share,
- (d) 210,750 plus 3,200 ML for each 0.01 ML per unit share of available water determination made for regulated river (general security) access licences when the sum of available water determinations for regulated river (general security) access licences for the water year is greater than 0.5 ML per unit share and less than or equal to 0.6 ML per unit share,
- (e) 243,000 ML when the sum of available water determinations for regulated river (general security) access licences for the water year is greater than 0.6 ML per unit share,

43 Available water determinations for Coleambally Irrigation (conveyance) access licences

Unless the Minister otherwise determines, available water determinations for Coleambally Irrigation (conveyance) access licences are to be made throughout the water year to provide a total volume of water allocation as follows:

- (a) 111,600 ML when the sum of available water determinations for regulated river (general security) access licences for the water year is less than or equal to 0.35 ML per unit share,
- (b) 111,600 ML plus 760 ML for each 0.01 ML per unit share of available water determination made for regulated river (general security) access licence when the sum of available water determinations for regulated river (general security) access licence for the water year is greater than 0.35 ML per unit share but less than or equal to 0.4 ML per unit share,
- (c) 115,400 ML plus 243.3 ML for each 0.01 ML per unit share of available water determination made for regulated river (general security) access licence when the sum of available water determinations for regulated river (general security) access licence for the water year is greater than 0.4 ML per unit share but less than 1 ML per unit share,
- (d) 130,000 ML when the sum of available water determinations for regulated river (general security) access licence for the water year is equal to 1 ML per unit share.

44 Available water determinations for supplementary water access licences

- (1) At the commencement of each water year, the Minister is to make an available water determination for supplementary water access licences, other than supplementary water (Lowbidgee) access licences, of 1 ML per unit share, unless a lower amount is determined under clause 36.
 - **Note.** The taking of water under a supplementary water access licence is subject to Division 3 of Part 8.
- (2) At the commencement of each water year, the Minister is to make an available water determination for supplementary water (Lowbidgee) access licences of 1 ML per unit share, unless a lower amount is determined under clause 36.

Part 7 Rules for granting access licences

Notes.

- This Part is made in accordance with sections 20 (2) (b), 61 and 63 of the Act. Section 61 of the Act provides for applications for specific purpose access licences in accordance with the regulations and the relevant water sharing plan.
- Access licences in the water source are granted subject to mandatory conditions imposed by this Plan, the regulations and the Act, and may also be subject to discretionary conditions.

45 Rules for granting access licences

- (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.
- (3) The Minister must not grant a regulated river (high security) (Aboriginal cultural) access licence if it would cause the sum of the share components of all regulated river (high security) (Aboriginal cultural) access licences in the water source to exceed 2,150 ML per year.

Note. Aboriginal person is defined in the Dictionary.

- (4) A person may make an application for an access licence which will receive water allocations that reflect the volume of water saved as a result of works or other actions taken under the Snowy Water Inquiry Outcomes Implementation Deed.
- (5) 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 Operation of water allocation accounts and managing access licences

Notes.

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

Division 1 Accounting for water allocation accounts

46 Credits to and debits from an individual water allocation account

- (1) For any access licence other than a supplementary water access licence or supplementary water (Lowbidgee) 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), or (5), or clause 48 apply.
- (2) For any access licence other than a supplementary water access licence or supplementary water (Lowbidgee) 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 48 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 or supplementary water (Lowbidgee) 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 source 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 the 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, regulated river (conveyance) access licence, Murrumbidgee Irrigation (conveyance) access licence and Coleambally Irrigation (conveyance) access licence the total water allocation credited to the account from available water determinations during the water year must not exceed 1 ML per unit share minus the volume carried over from the previous water year.

47 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) supplementary water access licence,
 - (e) supplementary water (Lowbidgee) 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 up to a limit of 0.3 ML per unit share for the following categories of licence:
 - (a) regulated river (general security) access licence,
 - (b) regulated river (conveyance) access licence,
 - (c) Murrumbidgee Irrigation (conveyance) access licence,
 - (d) Coleambally Irrigation (conveyance) access licence.

48 Taking of uncontrolled flows

Notes.

- 1 This clause is made under section 85A of the Act.
- 2 **Uncontrolled flows** and **effective available water** 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 to take water from uncontrolled flows, that have not been credited to the water allocation account of that licence, whenever:

- (a) the total effective available water for all regulated river (general security) access licences in a water year is less than or equal to 0.7 ML per unit share, and
- (b) the taking of water under supplementary water access licences is permitted in the same segment of the 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 equal to 0.85 ML per unit share minus the effective available water for the access licence 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 effective available water for the access licence in that 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.

49 Taking of water under supplementary water access licences and supplementary water (Lowbidgee) access licences

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

50 Announcement of supplementary water event

- (1) The Minister may announce a supplementary water event if, in the Minister's opinion, there will be uncontrolled flows in the segment of the water source to which the announcement applies.
- (2) The Minister must not announce a supplementary water event that permits the taking of water by supplementary water access licences other than supplementary water (Lowbidgee) access licences if each of the following apply:
 - (a) the sum of available water determinations for regulated river (general security) access licences in the water source in the water year exceeds 0.7 ML per unit share,
 - (b) the sum of available water determinations for regulated river (general security) access licences in the New South Wales Murray Regulated River Water Source in

- the water year, plus the water carried over by those access licences from the previous water year is less than 0.6 ML per unit share,
- (c) the uncontrolled flows are, in the Minister's opinion able to be re-regulated in the New South Wales Murray Regulated River Water Source.
- (3) The Minister must not announce a supplementary water event that permits the taking of water by supplementary water (Lowbidgee) access licences if each of the following apply:
 - (a) the sum of available water determinations for regulated river (general security) access licences in the New South Wales Murray Regulated River Water Source in the water year, plus the water carried over by those access licences from the previous water year is less than 0.6 ML per unit share,
 - (b) the uncontrolled flows are, in the Minister's opinion able to be re-regulated in the New South Wales Murray Regulated River Water Source.
- (4) 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 and supplementary water (Lowbidgee) access licences, subject to any Lowbidgee distribution rules established under clause 51.

51 Distribution rules for the Lowbidgee area

- (1) The Minister may establish rules for the distribution of water across, or within any part of Lowbidgee (*Lowbidgee distribution rules*).
- (2) In developing Lowbidgee distribution rules the Minister is to consider the following:
 - (a) the orderly, efficient and equitable sharing of water,
 - (b) historical rules for water distribution,
 - (c) infrastructure capacity constraints,
 - (d) the protection, restoration and rehabilitation of floodplains and their dependent ecosystems (including groundwater and wetlands),
 - (e) any other matters the Minister considers relevant.
- (3) Water supply works within Lowbidgee must be operated in accordance with any applicable Lowbidgee distribution rules established under this clause.

Notes.

- 1 **Lowbidgee** is defined in the Dictionary.
- The Lowbidgee distribution rules apply only to water flowing into Lowbidgee from Redbank Weir.

Part 9 Access licence dealing rules

Notes.

- Access licence dealings in the water source are subject to the provisions of the Act, the regulations, any access licence dealing principles established under section 71Z of the Act and the access licence dealing provisions established under this Part.
- As at 1 July 2019 the Access Licence Dealing Principles Order 2004 applies. The access licence dealing principles prevail over the access licence dealing provisions in this Plan to the extent of any inconsistency, as provided under section 71Z (3) of the Act.
- An application for a dealing may be refused, or conditions imposed on an access licence or water supply work approval at the time of a dealing, to give effect to the provisions of this Plan.
- This Part may be amended if individual daily extraction components are imposed on access licences in the water source.

52 Conversion of access licence to new category

Dealings under section 710 of the Act are prohibited.

Minister's Note.

The Department of Industry – 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 Murrumbidgee Stakeholder Advisory Panel). As such, no provisions to facilitate it have been included within this draft amended plan, other than an amendment provision within Part 12. If pursued, new provisions will need to be incorporated into the Plan.

More information will be prepared for additional stakeholder consultation before this issue is formally considered, however early stakeholder feedback on the concept is welcome.

53 Assignment of rights dealings (within the water source or within a water management area)

Notes. In some segments of the water source, 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 until individual daily extraction components are imposed on each licence in that segment under the Act.

- (1) A dealing under section 71Q of the Act is prohibited if all of the following apply:
 - (a) the dealing would increase the share component of an access licence which nominates a water supply work located in a segment of the water source specified in Column 1 of Table A below,

(b) the dealing would increase the total share components of all access licences that nominate a water supply work in that segment to an amount that would exceed that specified in Column 2 of Table A for that segment.

Table A

Column 1	Column 2
The Yanco System, as defined in Schedule 2 to this	The total of all share components, excluding
Plan	supplementary water access licence share
	components, that nominated a water supply work in
	the Yanco System as at 1 July 2011, minus those
	share components that were acquired by Water for
	Rivers, excluding any supplementary water access
	licence share components.

(2) A dealing under section 71Q of the Act that is from or to an access licence in another water source is prohibited.

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

Dealings under section 71R of the Act to or from the water source are prohibited.

55 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:
 - (a) an assignment of allocations to or from an access licence that nominates a water supply work located in Maude Weir pool or Redbank Weir pool that is used to supply water to Lowbidgee,
 - (b) a supplementary water (Lowbidgee) access licence,
- (4) Dealings under subclause (2) are prohibited, if in the Minster's opinion:
 - (a) there is nor than minimal likelihood that environmental water, domestic and stock rights, native title rights and the reliability of supply to all access licences in the water source will be affected,

(b) the supply of the volume of water arising from the assignment is not physically possible.

56 Assignment of water allocations dealings

- (1) 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 to a supplementary water access licence (including a supplementary water (Lowbidgee) 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*. This includes dealings involving the assignment of water allocations from a supplementary water (Lowbidgee) access licence.
 - (b) the dealing involves an assignment of water allocation from a supplementary water access licence (including a supplementary water (Lowbidgee) access licence) to an access licence of any other category,
 - (c) the dealing involves an assignment of water allocation between supplementary water access licences within the water source and those supplementary water access licences nominate water supply works in different supplementary water access zones as established by the Minister, except where subclause (2) applies,
 - (d) the dealing involves an assignment of water allocation to or from an access licence in the water source to or from an access licence in another water source unless the other water source is:
 - (i) the New South Wales Murray Regulated River Water Source, or
 - (ii) the Lower Darling Regulated River Water Source,
 - (e) the dealing complies with paragraph (d), but in the Minister's opinion, the supply of the volume of water allocation to the receiving access licence is not physically possible,
 - (f) the dealing complies with paragraph (d), but in the Minister's opinion, there is more than minimal likelihood that environmental water, basic landholder rights and the reliability of supply to all access licences in either of the water sources will be affected,
 - (g) the dealing complies with paragraph (d) but not with the Inter-Valley Trade Procedures established by the Minister.
- (2) Subclause (1) (c) does not apply if the water supply work nominated by the supplementary water access licence from which water is to be assigned, is within 5

kilometres of a supplementary water access zone boundary and the assignment is across that boundary.

57 Nomination of water supply work dealings

- (1) A dealing under section 71W of the Act is prohibited if all of the following apply:
 - (a) the dealing nominates a water supply work located in a segment of the water source specified in Column 1 of Table A in clause 53,
 - (b) following the dealing, the total share components of all access licences that nominate a water supply work in the segment of the water source will exceed the amount specified in Column 2 of Table A in clause 53 for that segment.
- (2) A dealing under section 71W of the Act is prohibited in any of the following circumstances:
 - (a) the dealing would increase the total share components of all access licences that nominate a water supply work in the Yanco System to an amount that would exceed that specified in Column 2 of Table A in clause 53, for that segment of the water source,
 - (b) a supplementary water (Lowbidgee) access licence being amended to nominate a water supply work that is not used to supply water to the area marked as Lowbidgee on the Plan Map,
 - (c) an access licence, other than a supplementary water (Lowbidgee) access licence, being amended to nominate a water supply work located in the area marked as Lowbidgee on the Plan Map,
 - (d) an access licence resulting from a dealing under section 71U of the Act nominating a water supply work located in Maude Weir pool or Redbank Weir pool that is used to supply water to the area marked as Lowbidgee on the Plan Map,
 - (e) an access licence in the 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,
 - (f) a supplementary water access licence being amended to nominate a water supply work in a different supplementary water access zone as established by the Minister, except where subclause (3) applies.
- (3) Subclause (2) (f) does not apply if the water supply work nominated by the supplementary water access licence being amended, is within 5 kilometres of a

supplementary water access zone boundary and the water supply work to be nominated is in the supplementary water access zone adjacent to that boundary.



Part 10 System operation rules

Notes

- 1 The approximate location of the places referred to in this Part are in the Plan Map.
- Operator and NSW Environmental Water Manager are defined in the Dictionary.

Division 1 Environmental flow rules for the water source

58 Minimum daily flow rules

(1) The operator must maintain a minimum daily flow in megalitres per day (*ML per day*) in the Murrumbidgee River at Balranald gauge (410003) throughout the water year, as calculated using the following formula:

$$300 + (0.4 \text{ x (the } 95^{th} \text{ percentile natural daily flow for the month} - 300))$$

where the 95th percentile natural daily flow for the month is the daily flow for each month that is exceeded in 95% of the days in that month.

Note. The 95th percentile natural daily flow is a computer generated number using hydrologic natural flow conditions and modelled over the entire period of flow information held by the Department. The hydrologic model is the one that, at the time, is approved by the Minister for determining natural flows in the water source.

- (2) The operator must not use the minimum flow maintained under subclause (1) to supply basic landholder rights or access licence water orders downstream of Balranald.
- (3) The operator must maintain a minimum daily flow of 50 ML per day in the Billabong Creek at Darlot gauge (410134) throughout the water year.

59 Transparent release rules for Blowering Dam

- (1) In this clause, *natural daily inflow to Blowering Dam water storage* means the actual daily inflow to that storage, minus any inflow occurring due to releases made from the Snowy Hydro Scheme.
- (2) The operator must make a transparent release of water from Blowering Dam throughout the water year in accordance with this clause.
- (3) When the operator determines the natural daily inflow to Blowering Dam water storage to be less than or equal to 560 ML per day, the operator must release an amount greater than or equal to the natural daily inflow to Blowering Dam water storage.
- (4) When the operator determines the natural daily inflow to Blowering Dam water storage to be greater than 560 ML per day, the operator must release an amount greater than or equal to 560 ML per day.
- (5) The water released from Blowering Dam under this clause must not be used to supply access licence water orders in the Tumut River between Blowering Dam and the confluence with the Murrumbidgee River.

Notes.

- 1 Water released under this clause is referred to as a transparent release.
- 2 The effect of this clause is that persons exercising basic landholder rights between Blowering Dam and the confluence with the Murrumbidgee River may use transparent releases made from Blowering Dam.

60 Transparent and translucent release rules for Burrinjuck Dam

(1) In this clause and in Schedule 2:

Burrinjuck effective storage volume is the active storage volume minus half the volume in regulated river (general security) access licence accounts that was carried over from the previous water year,

DRB is the daily release balance calculated in accordance with subclause (9),

full supply volume of a water storage is the storage volume that the Minister determines to be the limit for the purpose of storage of water, except in periods of flood operation. This excludes any water that cannot be accessed using existing outlet infrastructure,

respective Burrinjuck Dam supply volume percentage is the percentage calculated in accordance with subclause (7).

- (2) The operator must release water from Burrinjuck Dam throughout the water year in accordance with this clause.
- (3) Each day, the operator must calculate a transparent release volume that is the lesser of the following:
 - (a) the daily inflow to Burrinjuck Dam water storage, and
 - (b) 615 ML per day.
- (4) Each day between 22 April and 21 October, the operator must calculate the following translucent release volume:
 - (a) zero, when the daily inflow to Burrinjuck Dam water storage is less than or equal to 615 ML per day,
 - (b) the daily inflow multiplied by the respective Burrinjuck Dam supply volume percentage specified in Schedule 2, when the daily inflow to Burrinjuck Dam water storage is greater than 615 ML per day,

Note. Between 22 October and 21 April, the translucent release volume is equal to zero.

- (5) The respective Burrinjuck Dam supply volume percentage is to be determined by assessing whether:
 - (a) the effective volume of water in Burrinjuck Dam water storage is either:
 - (i) less than 30% of the full supply volume,

- (ii) greater than or equal to 30% of full supply volume and less than or equal to 50% of full supply volume, or
- (iii) greater than 50% of full supply volume, and
- (b) the catchment condition is either *dry*, *normal* or *wet*.
- (6) The catchment condition is to be determined as:
 - (a) *dry* when the daily flow in the Goodradigbee River at Wee Jasper gauge (410024) is less than or equal to the flow listed in column 2 of the table in Schedule 3 for the corresponding date,
 - (b) *normal* when the daily flow in the Goodradigbee River at Wee Jasper gauge (410024) is greater than the flow listed in column 2 and less than the flow listed in column 3 of the table in Schedule 3 for the corresponding date,
 - (c) wet when the daily flow in the Goodradigbee River at Wee Jasper gauge (410024) is equal to or greater than the flow listed in column 3 of the table in Schedule 3 for the corresponding date.
- (7) The respective Burrinjuck Dam supply volume percentage for each day is the number in Schedule 2 for the Burrinjuck effective storage volume determined in accordance with subclause (5), and the catchment condition determined in accordance with subclause (6).
- (8) On the day after the transparent release volume and translucent release volumes (if any) are determined in accordance with subclauses (3) and (4) respectively, unless subclauses (9), (10) or (11) apply, the operator is to release the following volume:
 - (a) 300 ML— if both the transparent release volume and the translucent release volume are equal to or less than 300 ML,
 - (b) the transparent release volume— if the transparent release volume:
 - (i) is greater than 300 ML but less than or equal to 450 ML, and
 - (ii) greater than or equal to the translucent release volume,
 - (c) 450 ML— if the transparent release volume:
 - (i) is greater than 450 ML but less than or equal to 615 ML, and
 - (ii) greater than or equal to the translucent release volume,
 - (d) the translucent release volume minus 315 ML— if the translucent release volume:
 - (i) is greater than 300 ML but less than or equal to 1,000 ML, and
 - (ii) greater than the transparent release volume,

- (e) the translucent release volume minus 315 ML, minus the lesser of 10% of the translucent release volume and the DRB— if the translucent release volume:
 - (i) is greater than 1,000 ML but less than or equal to 10,000 ML, and
 - (ii) the DRB is greater than zero,
- (f) the translucent release volume minus 315 ML— if the translucent release volume:
 - (i) is greater than 1,000 ML but less than or equal to 10,000 ML, and
 - (ii) the DRB is less than or equal to zero,
- (g) the translucent release volume— if the translucent release volume is greater than 10,000 ML.
- (9) The operator is to calculate and account for a daily release balance (**DRB**) as follows:
 - (a) the DRB is to be credited by the amount of the release minus 300 ML— whenever either of the following releases is made:
 - (i) a release under subclause (8) (b) that exceeds 300 ML,
 - (ii) a release under subclause (8) (c),
 - (b) the DRB is to be debited by 10% of the translucent release volume calculated under subclause (4), until the DRB is zero— whenever a release is made under subclause (8) (e) and (8) (f),
 - (c) the volume of the DRB must be carried over from one water year to the next.

Note. The DRB provides a continuous record of the net difference between the minimum translucent and transparent flows released from Burrinjuck Dam under this Plan and water credited to EWA2 as described in clause 64.

- (10) If a release of 450 ML has been made per day under subclause (8) for each of the previous 10 days, and the release calculated for the next day under subclause (8) is 450 ML, the operator must release the greater of the following:
 - (a) the inflows to Burrinjuck Dam over the previous day, up to a maximum of 615 ML,
 - (b) 300 ML.
- (11) If releases required to supply access licence water orders exceed the releases calculated under subclauses (8) or (10), then subclauses (8) and (10) do not apply and the operator must not release water under those subclauses.
- (12) If some or all of the releases required under subclause (8) or (10) cannot be made due to system operation constraints, then the operator must add the water not released to future releases that will be made on succeeding days under subclause (8) or (10).

Division 2 Environmental water allowance rules

61 Multiple environmental water allowances

- (1) The operator must maintain the following environmental water allowances for environmental purposes in the water source, as set out in this Division:
 - (a) environmental water allowance 1 (EWA 1),
 - (b) environmental water allowance 2 (EWA 2),
 - (c) environmental water allowance 3 (*EWA 3*),
- (2) The operator must keep an account of water credited to and debited from each of the environmental water allowances.

62 Crediting and debiting rules for EWA 1

- (1) Whenever the sum of water allocations from available water determinations for regulated river (general security) access licences during the water year and the water carried over by those access licences from the previous water year is at least 0.6 ML per unit share, the operator is to credit EWA 1 with any additional available water, up to a maximum of 50,000 ML in any water year, minus any water credited to EWA 1 in the previous water year under subclause (2).
- (2) Unless the operator otherwise determines, the operator is to credit EWA 1 with an additional volume of water up to 50,000 ML from water in PSV 2 on the request of the NSW Environmental Water Manager, provided that:
 - (a) there is no water remaining in EWA 1, EWA 2 or EWA 3,
 - (b) the NSW Environmental Water Manager has identified a need for additional releases to provide environmentally beneficial outcomes for waterbird breeding, wetland inundation, fish passage, fish breeding and water quality,
 - (c) the credit does not exceed the remaining water available in Provisional Storage Volume 2.
- (3) The operator is to debit EWA 1 with the lesser of the amount that the NSW Environmental Water Manager requests to be released under clause 65, and the amount that the operator releases.

63 Crediting and debiting rules for EWA 2

- (1) Each day that the operator makes a release from Burrinjuck Dam under clause 60 (8) (b) and (c), EWA 2 is to be credited with the lesser of:
 - (a) the inflows to Burrinjuck Dam water storage over the previous day, and
 - (b) 615 ML,

- minus 300 ML.
- (2) Each day that a release is made from Burrinjuck Dam under clause 60 (8) (c), EWA 2 is to be credited with 315 ML.
- (3) The operator is to debit EWA 2 with the lesser of the amount that the NSW Environmental Water Manager requests to be released under clause 65, and the amount that the operator releases.

64 Crediting and debiting rules for EWA 3

Note. EWA 3 operates only from 1 July to 31 December each water year. Any volumes remaining are transferred to PSV 2.

- (1) Whenever the sum of water allocations from available water determinations for regulated river (general security) access licences during the water year plus the water carried over in regulated river (general security) access licence water allocation accounts from the previous water year is at least 0.8 ML per unit share, the operator is to credit EWA 3 as follows:
 - (a) any additional available water that occurs between 1 July and 31 October is to be credited to EWA 3 up to the limit determined under subclause (3),
 - (b) 50% of any additional available water that occurs between 1 November and 31 December is to be credited to EWA 3 up to the limit determined under subclause (3).

Note. The other 50% of any additional available water occurring between 1 November and 31 December is to be credited to PSV 2 under clause 69.

- (2) Any additional available water that occurs between 1 January and 30 June must not be credited to EWA 3.
- (3) The operator is to credit EWA 3 under subclause (1) up to the cumulative total of the difference between the following:
 - (a) the translucent release volume calculated under clause 60 (3) (a) for the period 22 April to 31 October, and
 - (b) the translucent release volume for the period 22 April to 31 October if it were to be calculated using Schedule 4 instead of Schedule 2.

Note. The difference between the translucent release volumes referred to in subclauses (3) (a) and (b) above are known as foregone translucent release volumes.

- (4) The operator is to debit EWA 3 with the lesser of the amount that the NSW Environmental Water Manager requests to be released under clause 65, and the amount that the operator releases.
- (5) On 1 January each water year, all water in EWA 3 is to be withdrawn.

Note. The amount of water withdrawn from EWA 3 under subclause (5) is to be credited to PSV2 under clause 69.

65 Release rules for EWA 1, EWA 2 and EWA 3

- (1) Unless the operator otherwise determines, the operator is to release water from EWA 1, EWA 2 and EWA 3 on the request of the NSW Environmental Water Manager, in accordance with an applicable environmental watering plan but subject to subclauses (2) and (3).
- (2) The operator must release waters from EWA 1, EWA 2 and EWA 3 in the following order, with each category of water being emptied first before releasing water in a lower category:
 - (a) EWA 3,
 - (b) water in EWA 2 that has been carried over from the previous water year,
 - (c) water in EWA 2 that was credited in that water year,
 - (d) water in EWA 1 that has been carried over from the previous water year,
 - (e) water in EWA 1 that was credited under clause 62 (1) in that water year,
 - (f) water in EWA 1 that was credited under clause 62 (2) in that water year.
- (3) Releases from EWA 1, EWA 2 and EWA 3 must not be used to meet the following:
 - (a) water access licence water orders,
 - (b) the physical transfer of water from the water source as part of an assignment of water allocations under section 71T or 71V of the Act to another water source consistent with the Inter-Valley Trading Protocols established by the Minister.

66 Carryover rules for EWA 1 and EWA 2

- (1) Water remaining in EWA 1 at the end of the water year is to be carried over to the next water year, up to a limit of 50,000 ML.
- (2) Whenever water spills from Blowering Dam or Burrinjuck Dam, or both, the operator is to reduce the water in EWA 1 carried over from the previous water year in proportion to the amount spilled, up to a limit of 50% of the water remaining in EWA 1 that was carried over from the previous water year.
- (3) Water remaining in EWA 2 at the end of the water year is to be carried over to the next water year, subject to subclause (4).
- (4) Water remaining in EWA 2 at the end of the water year that was carried over from the previous water year must not be carried over to the following water year.

Division 3 Provisional storage volumes

67 Multiple provisional storage volumes

- (1) The operator must maintain the following provisional storage volumes for the purposes of increasing the size and frequency of spill events and to increase water availability in future water years, as set out in this Division:
 - (a) provisional storage volume 1 (*PSV 1*),
 - (b) provisional storage volume 2 (*PSV 2*).
- (2) The operator must keep an account of water credited to and debited from each of the provisional storage volumes.

Note. The provisional storage volumes consist of water set aside in water storages during a water year, thereby increasing the likelihood of spill events and increasing water for allocation in future years.

68 Crediting and debiting rules for PSV 1

- (1) Once EWA 1 has been credited with 50,000 ML under clause 62 (1), the operator is to credit any additional available water to PSV 1 up to a maximum of 25,000 ML in any water year.
- (2) Once EWA 3 has been credited under clause 64 (1) to the limit specified in clause 64 (3), the operator is to credit PSV 1 with 8,750 ML for each additional 0.01 ML per unit share of an available water determination made for regulated river (general security) access licences in that water year.
- (3) Water in PSV 1 must not be carried over to the following water year.

69 Crediting and debiting rules for PSV 2

- (1) Once PSV 1 has been credited with 200,000 ML under clause 68, the operator is to credit PSV 2 with any additional available water that occurs, other than between 1 November and 31 December, up to the amount withdrawn from PSV 2 at the end of the previous water year under subclause (5).
- (2) Once PSV 1 has been credited with 200,000 ML under clause 68, the operator is to credit PSV 2 with 50% of any additional available water that occurs between 1 November and 31 December, up to the maximum amount determined under subclause (3).
- (3) The maximum that PSV 2 is to be credited under subclause (2) is the sum of the amounts of water not credited to EWA 3 under clause 64 (3) in that water year and the previous water year.
- (4) On 1 January of each water year, the operator is to credit PSV 2 with the amount of water withdrawn from EWA 3 under clause 64 (5).
- (5) Water in PSV 2 must not be carried over to the following water year.

Division 4 Consultation

70 Consultation

The NSW Environmental Water Manager may consult with any government agency or the Environmental Water Advisory Group (EWAG) established by the Minister for the water source, or both, and consider any relevant advice, before taking action under this Plan.

Note. As at 1 July 2019, the Minister has conferred 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 5 General system operation rules

71 Maintenance of water supply

- (1) In this clause, the period of lowest accumulated inflows to the water source is identified by flow information held by the Department prior to 1 July 2004.
- (2) The operator must operate the water supply system in such a way that water would be able to be supplied during a repeat of the period of lowest accumulated inflows to the water source, to meet the following:
 - 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 of 100% for the following subcategories of regulated river (high security) access licence:
 - (i) Aboriginal cultural,
 - (ii) Community and education,
 - (iii) Environmental,
 - (iv) Research,
 - (v) Town water supply.
 - (d) available water determinations for regulated river (high security) access licences, other than those specified in paragraph (c), of 0.95 ML per unit share.
- (3) For the purposes of subclause (2), the operator must set aside sufficient volumes of water from inflows into the water source and in reserves held in Blowering Dam and Burrinjuck Dam water storages.

(4) The operator must operate the water supply system in such a way as to be able to supply a minimum of 80,000 ML of Murrumbidgee Irrigation (conveyance) access licence water allocations prior to the end of February in each water year.

Note. Reserves and water supply system are defined in the Dictionary.

72 Water delivery and channel capacity constraints

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

73 Priority of extraction for access licences and delivery of EWA water

- (1) This clause does not apply to supplementary water access licences or supplementary water (Lowbidgee) access licences.
- (2) If supply capability due to channel capacity is insufficient in any segment of the water source 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, local water utility access licences and regulated river (high security) access licences that have placed orders for water, in that order,
 - (c) once the requirements in (b) have been met, unless otherwise directed by the Minister, any remaining supply capability is to be shared between regulated river (general security) access licences that have placed an order for water and EWA deliveries that have been requested, in accordance with a method determined by the operator.
- (3) The operator is to consult with water user representatives, the NSW Environmental Water Manager and relevant government agencies, as the Minister considers appropriate, before determining the method in subclause (2) (c).

Notes.

1 **Supply capability** is defined in the Dictionary.

2 This clause may be amended if individual daily extraction components are imposed.

74 Rates of change to storage releases

In changing the rate of the release of water from a water storage or other water supply system structure, the operator must consider relevant environmental matters, damage to river banks and public safety.

75 Dam operation during floods and spills

- (1) The operator must operate Blowering Dam and Burrinjuck Dam during times of flood and spilling of water from those dams:
 - (a) in a manner that maintains the safety of dam infrastructure, and
 - (b) subject to subclause (a), as follows:
 - (i) leave the storages as full as possible after the flood or spilling of water, subject to the airspace operation rules in clause 76,
 - (ii) ensure that the general rate of increase of outflow does not exceed the rate of increase of inflow, subject to airspace operation rules in clause 76,
 - (iii) seek to lessen downstream flood damage.

76 Airspace operation rules

- (1) The operator must manage Burrinjuck Dam in accordance with the following:
 - (a) any volume of airspace that is maintained is to be no greater than that which is estimated to be refilled by storage inflows prior to a need to release from the storage to supply downstream requirements,
 - **Note.** Subclause (1) (a) means that the volume of water in Burrinjuck Dam water storage can be reduced to a level that is sufficient for the water storage to refill based on the minimum forecast recession inflows, in order to assist in mitigating the impact of floods.
 - (b) downstream impacts must be considered before releases to obtain airspace are made.
 - **Note.** Channel capacity constraints will be one of the factors considered in relation to subclause (1) (b).
- (2) The operator must manage Blowering Dam in accordance with the provisions of the Blowering Airspace Deed, to which the Water Administration Ministerial Corporation and Snowy Hydro Limited are parties.

77 Environmental flow reuse and piggybacking operation rules

(1) The Minister may make a Murrumbidgee 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 source.
- (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 Murrumbidgee 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 source.

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 Rules may request water be delivered from a particular water storage in this water source.
- (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 source.
- (5) The water supply system is to be managed in accordance with the Environmental Flow Reuse Procedures and the Piggybacking Procedures for the water source.

Part 11 Mandatory conditions

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

Division 1 General

78 Requirement to notify

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

Division 2 Access licences

79 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) 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 48 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 the licence holder may only take water from uncontrolled flows in accordance with any order made by the Minister under clause 48.
- (5) Each supplementary water access licence must have a mandatory condition that gives effect to Division 3 of Part 8.

Division 3 Water supply work approvals

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

80 General conditions

- (1) Water supply work approvals must have mandatory conditions to give effect to the clauses set out in this Division.
- (2) The water supply work must not be used to take water under an access licence unless in compliance with the relevant access rules for the taking of water as specified in Part 8.
- (3) Upon becoming aware of a breach of any condition of the approval holder must:
 - (i) notify the Minister as soon as practicable, and
 - (ii) if the notification under paragraph (a) was not in writing, confirm this notification in writing within seven days of becoming aware of the breach.
- (4) 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.
- (5) Water extraction, water management infrastructure and cropping details must be provided on request, in the form and in accordance with procedures established by the Minister.
- (6) The taking of water may only occur in accordance with the conditions applying to the access licence that will have its water allocation account debited for that take.
- (7) Subclauses (4) to (6) do not apply to approvals for water supply works held by WaterNSW provided the approval is not nominated by an access licence.
- (8) Subclauses (4) and (5) cease to have effect in relation to an approval subject to a mandatory metering equipment condition on the day the condition applies to the approval.
- (9) Subclauses (4) and (5) cease to have effect on 1 December 2021.

Notes.

- 1 Mandatory metering equipment condition is defined in clause 228 of the *Water Management* (General) Regulation 2018.
- Clause 230 of the Water Management (General) Regulation 2018 provides that the mandatory metering equipment condition applies to existing and new water supply works required to have a meter from 1 April 2019, and to other approvals in the water source from 1 December 2021.

81 Lowbidgee water supply works

- (1) Water supply work approvals for water supply works that use water in the Lowbidgee must have mandatory conditions to give effect to any Lowbidgee distribution rules established under clause 51.
- (2) Subclause (1) does not apply to the following water supply works:
 - (a) those used solely to take water for basic landholder rights,
 - (b) those used to take or distribute water in the area of the Plan Map marked as Nimmie-Caira within Lowbidgee.

Note.

- The current Lowbidgee distribution rules apply to water supply works that take or distribute water flowing into the Lowbidgee from Redbank Weir only.
- 2 **Use** in relation to a water management work is defined in the Dictionary to the Act.



Part 12 Amendment of this Plan

Notes.

- 1 This Part sets out amendments authorised by this Plan.
- 2 For the purposes of section 87 of the Act, the initial period for the water source expired before the commencement of this Plan.

82 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.

83 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.

84 Amendments relating to Part 8

Part 8 may be amended to do any of the following:

- (a) increase the carryover percentage up to a maximum of 0.5 ML/unit share and apply different maximum carryover figures for regulated river (general security) access licence water accounts based on different zones within the water source,
- (b) vary the water allocation maximum carryover percentage of Murrumbidgee
 Irrigation (conveyance) access licence and Coleambally Irrigation (conveyance)
 access licence,
- (c) vary when water may be extracted and the total volume of water that may be extracted without debit to the water allocation account of regulated river (general security) access licences.

85 Amendments relating to Part 9

Part 9 may be amended to permit conversion of regulated river (high security) access licences to access licences in unregulated river water sources that are upstream of Burrinjuck Dam or Blowering Dam.

86 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.
- (b) environmental flow reuse and piggybacking operation rules.

87 Amendments relating to floodplain harvesting

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

88 Amendments relating to individual daily extraction components

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

89 Dictionary

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

90 Schedules

Schedule 5 may be amended to add or remove and office.

91 Other amendments (general)

- (1) This Plan may be amended to include provisions for the following:
 - (a) the interception of water before it reaches a stream or aquifer by plantations or other means.
 - (b) the management of salt interception schemes,
 - (c) return flows, as referred to in Division 5 of Part 2 of Chapter 3 of the Act.
- (2) This Plan may be amended to give effect to, or in connection with, a determination of native title under the *Native Title Act 1993* of the Commonwealth.

92 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.

Dictionary

Aboriginal person has the same meaning as under section 4 of the *Aboriginal Land Rights Act* 1983.

additional available water means water in a water storage that has not been allocated by an available water determination.

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

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

Blowering Dam water storage as defined in the Murrumbidgee Water Management Area Regulated River Order (Government Gazette No 110 of 1 July 2004), as set out in item 21 (3) of Schedule 12 of the Act.

Burrinjuck Dam water storage is as defined in the Murrumbidgee Water Management Area Regulated River Order (Government Gazette No 110 of 1 July 2004), as set out in item 21 (2) of Schedule 12 of the Act.

plantation forestry means a commercial plantation as defined in section 1.07 of the Basin Plan. *effective available water* for a regulated river (general security) access licence is the sum of:

- (a) the available water determinations made for the regulated river (general security) access licences in the water year, and
- (b) the water carried over in the regulated river (general security) access licence water allocation account from the previous water year less 0.15 ML per unit share.

EWA means an environmental water allowance referred to in Part 10, as relevant.

floodplain harvesting means the collection, extraction or impoundment of water flowing across floodplains, including rainfall runoff and overbank flow, excluding the take of water pursuant to any of the following:

- (a) a water access licence other than a floodplain harvesting access licence,
- (b) a basic landholder right,
- (c) an exemption from the need to hold a licence to take water under the Act.

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

Lowbidgee means the area marked as Lowbidgee on the Plan Map.

Minister means the Minister administering the Act.

ML means megalitres.

Murray-Darling Basin Agreement means the Murray-Darling Basin Agreement as set out in Schedule 1 of the *Water Act* 2007 (Cth).

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

NSW Environmental Water Manager means the NSW Government department or agency 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.

New South Wales Murray Regulated River Water Source means the New South Wales Murray Regulated River Water Source as established in the Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016.

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

Note. As at 1 July 2019, this is WaterNSW.

reserves means volumes of water put aside in a water storage to provide for future water requirements.

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.

uncontrolled flow means flow not able to be captured in a water storage that are in excess of that needed to meet the environmental provisions of this Plan, basic landholder rights and water orders placed by access licences.

water source as defined in clause 4.

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 operator, 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 Yanco System

The Yanco System includes the following:

- (a) Billabong Creek from its junction with Colombo Creek to its confluence with the Edward River,
- (b) Billabong Creek upstream from its confluence with Colombo Creek to the concrete dam situated between portion 63, Parish of Cocketgedong and portion 24, Parish of Nowranie both in the County of Urana,
- (c) Colombo Creek from its offtake from Yanco Creek to its confluence with Billabong Creek,
- (d) Cuddell Creek from the intersection point of creek bank and the common boundary between portions 4 and 5, Parish of Cuddell, County of Mitchell, to its confluence with Yanco Creek,
- (e) Forest Creek from its offtake from Billabong Creek within T.S.R. 30139, Parish of Thulabin, County of Townsend downstream to Warriston Weir,
- (f) Nowranie Creek upstream from its confluence with Billabong Creek to the concrete dam situated within portion 27, Parish of Nowranie, County of Urana,
- (g) Sheepwash Creek from its confluence with Billabong Creek within portion 49, Parish of Wanganella, County of Townsend, upstream to its intersection with the eastern boundary of said portion, parish and county,
- (h) Unnamed lagoon, from its upstream effluence to its downstream confluence with Colombo Creek both located adjacent to Morundah Racecourse all within Reserve 67478, Parish of Waugh, County of Urana,
- (i) Unnamed watercourse, from its confluence with Yanco Creek within portion 22, Parish of Moonbria, County of Townsend, to the earth dam located 158 metres upstream within portion 3, Parish of Moonbria, County of Townsend,
- (j) Unnamed watercourse offtaking from Yanco Creek within portion 159, Parish of Bundure, County of Urana, to its upper limits within portion 58, Parish of Douglas, County of Urana,
- (k) Unnamed watercourse from its offtake from an unnamed watercourse within portion 57, Parish of Douglas, County of Urana, and traversing portions 58, 61 and 156, Parish of Douglas, County of Urana,

- (l) Unnamed watercourse (artificially improved), from its confluence with Yanco Creek within WR 1630 adjacent to portion 73, Parish of Uroly, County of Boyd, to its confluence with Back Creek within said portion,
- (m) Back Creek from its confluence with unnamed watercourse within portion 73, Parish of Uroly, County of Boyd, to its confluence with Pine Watercourse and Washpen Creek within portion 72, Parish of Uroly, County of Boyd,
- (n) Unnamed watercourse from its offtake from Colombo Creek within Reserve 1631, east of Portion 127, Parish of Bingagong, County of Urana, downstream to its confluence with Yanco Creek within Portion 114, Parish of Bingagong, County of Urana,
- (o) Unnamed watercourse from its junction with Yanco Creek, within Reserve 1630, fronting Portion 128, Parish of Uroly, County of Boyd, to its junction with another unnamed watercourse within Portion 132, Parish of Uroly, County of Boyd, at a point approximately 870 metres east from the 2011 No 340 western boundary and 50 metres south from the northern boundary of the said portion,
- (p) Washpen Creek from its confluence with Pine Watercourse and Back Creek within portion 72, Parish of Uroly, County of Boyd to its confluence with Pine Watercourse and Woolshed Creek within the Road Reserve located between portions 163 and 176, Parish of Howell, County of Boyd,
- (q) Woolshed Creek from its confluence with Pine Watercourse and Washpen Creek within Road Reserve between portions 163 and 176, Parish of Howell, County of Boyd, to its confluence with Yanco Creek within WR 1684 adjacent to portion 142, Parish of Howell, County of Urana,
- (r) Yanco Creek from its offtake from the Murrumbidgee River to its confluence with Billabong Creek.

Schedule 2 Burrinjuck Dam translucency percentage table

DATE	VOLU	JUCK EFFECTIVIME < 30% FULL	L SUPPLY	30% FULL SUPPLY VOLUME OF BURRINJUCK < BURRINJUCK EFFECTIVE STORAGE VOLUME < 50% FULL SUPPLY VOLUME OF BURRINJUCK			BURRINJUCK EFFECTIVE STORAGE VOLUME > 50% FULL SUPPLY VOLUME OF BURRINJUCK		
	WET	NORMAL	DRY	WET	NORMAL	DRY	WET	NORMAL	DRY
22-APR	0	1	0	0	1	0	0	1	0
23-APR	0	2	0	0	2	0	0	2	0
24-APR	0	3	0	0	3	0	0	3	0
25-APR	0	4	0	0	4	0	0	4	0
26-APR	0	5	0	0	5	0	0	5	0
27-APR	0	6	0	0	6	0	0	6	0
28-APR	0	7	0	0	7	0	0	7	0
29-APR	0	8	0	0	8	0	0	8	0
30-APR	0	9	0	0	9	0	0	9	0
01-MAY	0	10	0	0	10	0	0	10	0
02-MAY	5	11	0	5	11	0	5	11	0
03-MAY	12 18	13	0	12 18	13	0	12 18	12 13	0
04-MAY 05-MAY	25	14	0	25	14	0	25	14	0
05-MAY	31	15	0	31	15	0	31	15	0
07-MAY	37	16	0	37	16	0	37	16	0
07-MAY	43	17	0	43	17	0	43	17	0
09-MAY	48	18	0	48	18	0	48	18	0
10-MAY	50	20	0	54	20	0	54	20	0
11-MAY	50	21	0	59	21	0	59	21	0
12-MAY	50	22	0	65	22	0	65	22	0
13-MAY	50	23	0	70	23	0	70	23	0
14-MAY	50	24	0	74	24	0	74	24	0
15-MAY	50	25	0	79	25	0	79	25	0
16-MAY	50	26	2	83	26	2	83	26	2
17-MAY	50	27	3	88	27	3	88	27	3
18-MAY	50	28	4	91	28	4	91	28	4
19-маү	50	29	5	95	29	5	95	29	5
20-MAY	50	30	6	99	30	6	99	30	6
21-MAY	50	31	7	100	31	7	100	31	/
22-MAY	50	32	8	100	32	8	100	32	8
23-MAY	50 50	34	9	100	34	9	100	34 35	9
24-MAY 25-MAY	50	35 36	10	100	35 36	11	100	36	11
26-MAY	50	37	12	100	37	12	100	37	12
27-MAY	50	38	13	100	38	13	100	38	13
28-MAY	50	39	14	100	39	14	100	39	14
29-MAY	50	40	15	100	40	15	100	40	15
30-MAY	50	41	16	100	41	16	100	41	16
31-MAY	50	42	17	100	42	17	100	42	17
01-JUN	50	43	18	100	43	18	100	43	18
02-JUN	50	44	19	100	44	19	100	44	19
03-JUN	50	45	20	100	45	20	100	45	20
04-JUN	50	46	21	100	46	21	100	46	21
05-JUN	50	47	22	100	47	22	100	47	22
06-JUN	50	48	23	100	48	23	100	48	23
07-JUN	50	49	24	100	49	24	100	49	24
08-JUN	50	50	25	100	50	25	100	50	25
09-JUN	50	50	26	100	50	26	100	51	26
10-JUN	50	50	26	100	50	26	100	52	26
11-JUN	50	50	27	100	50	27	100	53	27
12-JUN	50	50	28	100	50	28	100	54	28
13-JUN 14-JUN	50 50	50	29	97 93	50 50	29 30	97 93	55	29 30
		50	30 31			31		56 57	
15-JUN 16-JUN	50 50	50 50	31	89 84	50 50	31	89 84	58	31 31

DATE	VOLU	JUCK EFFECTIVINE < 30% FULL	L SUPPLY	BUR EFFEC	FULL SUPPLY V RINJUCK < BU TIVE STORAGE FULL SUPPLY V BURRINJUC	RRINJUCK E VOLUME < VOLUME OF	BURRINJUCK EFFECTIVE STORAGE VOLUME > 50% FULL SUPPLY VOLUME OF BURRINJUCK		
	WET	NORMAL	DRY	WET	NORMAL	DRY	WET	NORMAL	DRY
17-JUN	50	50	32	78	50	32	78	59	32
18-JUN	50	50	33	72	50	33	72	60	33
19-JUN	50	50	34	66	50	34	66	61	34
20-JUN	50	50	34	59	50	34	59	62	34
21-JUN	50	50	35	52	50	35	52	63	35
22-JUN	45 37	50 50	36 37	45 37	50 50	36 37	45 37	64 64	36 37
23-JUN 24-JUN	29	50	37	29	50	37	29	65	37
25-JUN	20	50	38	20	50	38	20	66	38
26-JUN	11	50	39	11	50	39	11	67	39
27-JUN	1	50	39	1	50	39	1	68	39
28-JUN	0	50	40	0	50	40	0	69	40
29-JUN	0	50	40	0	50	40	0	69	40
30-JUN	0	50	41	0	50	41	0	70	41
01-JUL	0	50	41	0	50	41	0	71	41
02-JUL	0	50	42	0	50	42	0	72	42
03-JUL 04-JUL	0	50 50	42 43	0	50 50	42 43	0	72 73	42 43
04-JUL 05-JUL	0	50	43	0	50	43	0	74	43
06-JUL	0	50	44	0	50	44	0	75	44
07-JUL	0	50	44	0	50	44	0	75	44
08-JUL	0	50	45	0	50	45	0	76	45
09-JUL	0	50	45	0	50	45	0	77	45
10-JUL	0	50	45	0	50	45	0	77	45
11-JUL	0	50	46	0	50	46	0	78	46
12-JUL	0	50	46	0	50	46	0	79	46
13-JUL	0	50	46	0	50	46	0	79	46
14-JUL 15-JUL	0	50 50	46 47	0	50 50	46 47	0	80 80	46 47
16-JUL	0	50	47	0	50	47	0	81	47
17-JUL	0	50	47	0	50	47	0	81	47
18-JUL	0	50	47	0	50	47	0	82	47
19-JUL	0	50	47	0	50	47	0	82	47
20-JUL	0	50	47	0	50	47	0	83	47
21-JUL	0	50	47	0	50	47	0	83	47
22-JUL	0	50	47	0	50	47	0	84	47
23-JUL	0	50	47	0	50	47	0	84	47
24-JUL 25-JUL	0	50 50	47	0	50 50	47 47	0	84 85	47 47
26-JUL	0	50	47	0	50	47	0	85	47
27-JUL	0	50	47	0	50	47	0	86	47
28-JUL	0	50	46	0	50	46	0	86	46
29-JUL	0	50	46	0	50	46	0	86	46
30-JUL	0	50	46	0	50	46	0	86	46
31-JUL	0	50	46	0	50	46	0	87	46
01-AUG	0	50	45	0	50	45	0	87	45
02-AUG	0	50	45	0	50	45	0	87	45
03-aug 04-aug	0	50 50	45 44	0	50 50	45 44	0	87 87	45 44
05-AUG	0	50	44	0	50	44	0	87	44
06-AUG	0	50	43	0	50	43	0	88	43
07-AUG	0	50	43	0	50	43	0	88	43
08-AUG	0	50	42	0	50	42	0	88	42
09-AUG	0	50	41	0	50	41	0	88	41
10-AUG	0	50	41	0	50	41	0	88	41
11-AUG	0	50	40	0	50	40	0	88	40
12-AUG	0	50	39	0	50	39	0	88	39
13-AUG	0	50	39	0	50	39	0	88	39
14-AUG	0	50	38	0	50	38	0	87	38 37
15-AUG	0	50 50	37 36	0	50 50	37 36	0	87 87	36
16-AUG	U	30	30	U	30	30	U	0/	30

DATE	VOLUI	JUCK EFFECTIVME < 30% FULLUME OF BURR	L SUPPLY	30% FULL SUPPLY VOLUME OF BURRINJUCK < BURRINJUCK EFFECTIVE STORAGE VOLUME < 50% FULL SUPPLY VOLUME OF BURRINJUCK			BURRINJUCK EFFECTIVE STORAGE VOLUME > 50% FULL SUPPLY VOLUME OF BURRINJUCK		
	WET	NORMAL	DRY	WET	NORMAL	DRY	WET	NORMAL	DRY
17-AUG	0	50	35	0	50	35	0	87	35
18-AUG	0	50	34	0	50	34	0	87	34
19-AUG	0	50	33	0	50	33	0	86	33
20-AUG	0	50	32	0	50	32	0	86	32
21-AUG	0	50	31	0	50	31	0	86	31
22-AUG	0	50	30	0	50	30	0	86	30
23-AUG	0	50	29	0	50	29	0	85	29
24-AUG	0	50	28	0	50	28	0	85	28
25-AUG	0	50	26	0	50	26 25	0	84	26
26-AUG 27-AUG	0	50 50	25 24	0	50 50	25	0	84	25 24
27-AUG 28-AUG	0	50	22	0	50	22	0	84 83	22
29-AUG	0	50	21	0	50	21	0	82	21
30-AUG	0	50	19	0	50	19	0	82	19
31-AUG	0	50	18	0	50	18	0	81	18
01-SEP	0	50	16	0	50	16	0	81	16
02-SEP	0	50	15	0	50	15	0	80	15
03-SEP	0	50	13	0	50	13	0	79	13
04-SEP	0	50	11	0	50	11	0	79	11
05-SEP	0	50	9	0	50	9	0	78	9
06-SEP	0	50	8	0	50	8	0	77	8
07-SEP	0	50	6	0	50	6	0	76	6
08-SEP	0	50	4	0	50	4	0	75	4
09-SEP	0	50	2	0	50	2	0	74	2
10-SEP	0	50	0	0	50	0	0	73	0
11-SEP	0	50	0	0	50	0	0	72	0
12-SEP	0	50	0	0	50	0	0	71	0
13-SEP 14-SEP	0	50 50	0	0	50 50	0	0	70 69	0
15-SEP	0	50	0	0	50	0	0	68	0
16-SEP	0	50	0	0	50	0	0	67	0
17-SEP	0	50	0	0	50	0	0	66	0
18-SEP	0	50	0	0	50	0	0	65	0
19-SEP	0	50	0	0	50	0	0	63	0
20-SEP	0	50	0	0	50	0	0	62	0
21-SEP	0	50	0	0	50	0	0	61	0
22-SEP	0	50	0	0	50	0	0	59	0
23-SEP	0	50	0	0	50	0	0	58	0
24-SEP	0	50	0	0	50	0	0	57	0
25-SEP	0	50	0	0	50	0	0	55	0
26-SEP	0	50	0	0	50	0	0	54	0
27-SEP 28-SEP	0	50 50	0	0	50 50	0	0	52 50	0
28-SEP 29-SEP	0	49	0	0	49	0	0	49	0
30-SEP	0	47	0	0	47	0	0	47	0
01-oct	0	45	0	0	45	0	0	45	0
02-oct	0	44	0	0	44	0	0	44	0
03-oct	0	42	0	0	42	0	0	42	0
04-oct	0	40	0	0	40	0	0	40	0
05-ост	0	38	0	0	38	0	0	38	0
06-ост	0	36	0	0	36	0	0	36	0
07-ост	0	34	0	0	34	0	0	34	0
08-oct	0	32	0	0	32	0	0	32	0
09-OCT	0	30	0	0	30	0	0	30	0
10-oct	0	28	0	0	28	0	0	28	0
11-OCT	0	26	0	0	26	0	0	26	0
12-OCT	0	24	0	0	24	0	0	24	0
13-OCT	0	21 19	0	0	21 19	0	0	21 19	0
<u>14-ост</u> 15-ост	0	17	0	0	17	0	0	17	0
16-0CT	0	14	0	0	14	0	0	14	0

DATE	BURRINJUCK EFFECTIVE STORAGE VOLUME < 30% FULL SUPPLY VOLUME OF BURRINJUCK			30% FULL SUPPLY VOLUME OF BURRINJUCK < BURRINJUCK < EFFECTIVE STORAGE VOLUME < 50% FULL SUPPLY VOLUME OF BURRINJUCK			BURRINJUCK EFFECTIVE STORAGE VOLUME > 50% FULL SUPPLY VOLUME OF BURRINJUCK		
	WET	NORMAL	DRY	WET	NORMAL	DRY	WET	NORMAL	DRY
17-ост	0	12	0	0	12	0	0	12	0
18-ост	0	9	0	0	9	0	0	9	0
19-ост	0	7	0	0	7	0	0	7	0
20-ост	0	4	0	0	4	0	0	4	0
21-ост	0	2	0	0	2	0	0	2	0



Schedule 3 Goodradigbee flow classification table

Note. The following table indicates the average daily flows in the Goodradigbee River at Wee Jasper, which are to be used for the purpose of classifying the catchment condition for Burrinjuck Dam.

Column 1	Column 2	Column 3			
DATE	UPPER LIMIT OF "DRY CONDITIONS" FLOWS - ML/DAY	UPPER LIMIT OF "NORMAL CONDITIONS" FLOWS - ML/DAY			
22-Apr	131	486			
23-Apr	127	399			
24-Apr	129	368			
25-Apr	131	349			
26-Apr	137	354			
27-Apr	137	339			
28-Apr	143	321			
29-Apr	147	339			
30-Apr	159	382			
01-May	152	348			
02-May	156	365			
03-May	154	613			
04-May	158	458			
05-May	154	407			
06-May	151	364			
07-May	171	398			
08-May	157	340			
09-May	152	304			
10-May	165	343			
11-May	184	437			
12-May	183	376			
13-May	178	671			
14-May	175	787			
15-May	166	507			
16-May	177	483			
17-May	182	521			
18-May	201	636			
19-May	208	774			
20-May	204	572			
21-May	194	473			
22-May	200	452			
23-May	222	531			
24-May	228	870			
25-May	243	743			
26-May	244	670			
27-May	306	737			
28-May	301	834			
29-May	252	683			
30-May	246	1058			
31-May	314	1294			
01-Jun	270	951			
02-Jun	271	799			
03-Jun	320	917			

COLUMN 1	Column 2	COLUMN 3
DATE	UPPER LIMIT OF "DRY CONDITIONS" FLOWS - ML/DAY	UPPER LIMIT OF "NORMAL CONDITIONS" FLOWS - ML/DAY
04-Jun	277	776
05-Jun	297	851
06-Jun	268	845
07-Jun	251	916
08-Jun	276	843
09-Jun	272	756
10-Jun	294	936
11-Jun	324	1376
12-Jun	426	1338
13-Jun	378	1070
14-Jun	338	831
15-Jun	318	772
16-Jun	311	745
17-Jun	317	804
18-Jun	315	1054
19-Jun	328	1230
20-Jun	381	987
21-Jun	358	977
22-Jun	354	1009
23-Jun	337	1036
24-Jun	361	917
25-Jun	398	1171
26-Jun	381	1354
27-Jun	375	1655
28-Jun	399	1217
29-Jun	441	1319
30-Jun	460	1593
01-Jul	422	1502
02-Jul	459	1603
03-Jul	478	1769
04-Jul	522	1982
05-Jul	502	2205
06-Jul	610	3464
07-Jul	622	2660
08-Jul	576	2453
09-Jul	554	1887
10-Jul	606	1703
11-Jul	568	1716
12-Jul	574	1699
13-Jul	521	1510
14-Jul	495	1667
15-Jul	505	1422
16-Jul	547	1415
17-Jul	599	1770
18-Jul	528	2043
19-Jul	509	2001
20-Jul	480	1604
21-Jul	499	1822
22-Jul	483	2565

Column 1	Column 2	Column 3
DATE	UPPER LIMIT OF "DRY CONDITIONS" FLOWS - ML/DAY	UPPER LIMIT OF "NORMAL CONDITIONS" FLOWS - ML/DAY
23-Jul	553	2470
24-Jul	493	2883
25-Jul	596	2955
26-Jul	646	3208
27-Jul	681	2280
28-Jul	866	2118
29-Jul	883	2418
30-Jul	961	2143
31-Jul	883	2074
01-Aug	804	1871
02-Aug	766	1611
03-Aug	769	1616
04-Aug	689	1642
05-Aug	695	1662
06-Aug	927	2527
	899	2444
07-Aug	867	2200
08-Aug		
09-Aug	803	2067
10-Aug	792	1900
11-Aug	824	1737
12-Aug	859	1747
13-Aug	855	1951
14-Aug	836	1958
15-Aug	854	2241
16-Aug	945	2427
17-Aug	896	2206
18-Aug	932	2127
19-Aug	881	2056
20-Aug	878	1997
21-Aug	869	2675
22-Aug	835	2656
23-Aug	828	2685
24-Aug	851	2361
25-Aug	865	2229
26-Aug	899	2432
27-Aug	862	2992
28-Aug	877	2421
29-Aug	849	2203
30-Aug	907	2151
31-Aug	909	2394
01-Sep	1006	2448
02-Sep	1057	2324
03-Sep	1134	2321
04-Sep	1188	2161
05-Sep	1154	2247
06-Sep	1061	2067
07-Sep	1050	1933
08-Sep	1027	2215
09-Sep	1024	2352

Column 1	Column 2	Column 3
DATE	UPPER LIMIT OF "DRY CONDITIONS" FLOWS - ML/DAY	UPPER LIMIT OF "NORMAL CONDITIONS" FLOWS - ML/DAY
10-Sep	1078	2206
11-Sep	1134	2188
12-Sep	1161	2325
13-Sep	1167	2215
14-Sep	1145	2274
15-Sep	1059	2092
16-Sep	993	1971
17-Sep	1111	2126
18-Sep	1216	2670
19-Sep	1166	2551
20-Sep	1160	2186
21-Sep	1109	2101
22-Sep	983	2081
23-Sep	917	1995
24-Sep	857	1834
25-Sep	803	2110
26-Sep	791	1926
27-Sep	759	2128
28-Sep	806	1879
29-Sep	807	1896
30-Sep	806	1701
01-Oct	747	1483
02-Oct	741	1366
03-Oct	780	1713
04-Oct	714	3234
05-Oct	706	2499
06-Oct	687	1828
07-Oct	704	1614
08-Oct	689	1445
09-Oct	701	1592
10-Oct	655	1629
11-Oct	630	1502
12-Oct	626	1365
13-Oct	636	1262
14-Oct	627	1227
15-Oct	587	1273
16-Oct	584	1287
17-Oct	602	1241
18-Oct	601	1689
19-Oct	584	1714
20-Oct	573	1676
21-Oct	565	1501

Schedule 4 Initial "unclipped" translucency percentage table

BURRINJUCK EFFECTIVE STORAGE VOLUME < 30% FULL SUPPLY VOLUME OF BURRINJUCK				30% FULL SUPPLY VOLUME OF BURRINJUCK < BURRINJUCK EFFECTIVE STORAGE VOLUME < 50% FULL SUPPLY VOLUME OF BURRINJUCK			BURRINJUCK EFFECTIVE STORAGE VOLUME > 50% FULL SUPPLY VOLUME OF BURRINJUCK		
	WET	NORMAL	DRY	WET	NORMAL	DRY	WET	NORMAL	DRY
22-APR	0	1	0	0	1	0	0	1	0
23-APR	0	2	0	0	2	0	0	2	0
24-APR	0	3	0	0	3	0	0	3	0
25-APR	0	4	0	0	4	0	0	4	0
26-APR	0	5	0	0	5	0	0	5	0
27-APR	0	6	0	0	6	0	0	6	0
28-APR	0	7	0	0	7	0	0	7	0
29-apr 30-apr	0	<u>8</u> 9	0	0	8	0	0	9	0
01-MAY	0	10	0	0	10	0	0	10	0
02-MAY	5	11	0	5	11	0	5	11	0
03-MAY	12	12	0	12	12	0	12	12	0
04-MAY	18	13	0	18	13	0	18	13	0
05-MAY	25	14	0	25	14	0	25	14	0
06-MAY	31	15	0	31	15	0	31	15	0
07-MAY	37	16	0	37	16	0	37	16	0
08-мач	43	17	0	43	17	0	43	17	0
09-маү	48	18	0	48	18	0	48	18	0
10-MAY	54	20	0	54	20	0	54	20	0
11-MAY	59	21	0	59	21	0	59	21	0
12-MAY	65	22	0	65	22	0	65	22	0
13-MAY	70	23	0	70	23	0	70	23	0
14-MAY	74 79	24 25	0	74 79	24 25	0	74 79	24 25	0
15-MAY 16-MAY	83	26	2	83	26	2	83	26	2
17-MAY	88	27	3	88	27	3	88	27	3
18-MAY	91	28	4	91	28	4	91	28	4
19-MAY	95	29	5	95	29	5	95	29	5
20-MAY	99	30	6	99	30	6	99	30	6
21-MAY	100	31	7	100	31	7	100	31	7
22-MAY	100	32	8	100	32	8	100	32	8
23-MAY	100	34	9	100	34	9	100	34	9
24-MAY	100	35	10	100	35	10	100	35	10
25-MAY	100	36	11	100	36	11	100	36	11
26-MAY	100	37	12	100	37	12	100	37	12
27-MAY	100 100	38 39	13	100	38 39	13 14	100	38 39	13 14
28-MAY 29-MAY	100	40	15	100	40	15	100	40	15
30-MAY	100	41	16	100	41	16	100	41	16
31-MAY	100	42	17	100	42	17	100	42	17
01-JUN	100	43	18	100	43	18	100	43	18
02-JUN	100	44	19	100	44	19	100	44	19
03-JUN	100	45	20	100	45	20	100	45	20
04-JUN	100	46	21	100	46	21	100	46	21
05-JUN	100	47	22	100	47	22	100	47	22
06-JUN	100	48	23	100	48	23	100	48	23
07-JUN	100	49	24	100	49	24	100	49	24
08-JUN	100	50 51	25 26	100	50 51	25 26	100	50 51	25 26
09-JUN 10-JUN	100 100	52	26	100	52	26	100	52	26
10-JUN 11-JUN	100	53	27	100	53	27	100	53	27
12-JUN	100	54	28	100	54	28	100	54	28
13-JUN	97	55	29	97	55	29	97	55	29
14-JUN	93	56	30	93	56	30	93	56	30
15-JUN	89	57	31	89	57	31	89	57	31
16-JUN	84	58	31	84	58	31	84	58	31
17-JUN	78	59	32	78	59	32	78	59	32

BURRINJUCK EFFECTIVE STORAGE VOLUME < 30% FULL SUPPLY DATE VOLUME OF BURRINJUCK				BUR EFFEC	30% FULL SUPPLY VOLUME OF BURRINJUCK < BURRINJUCK EFFECTIVE STORAGE VOLUME < 50% FULL SUPPLY VOLUME OF BURRINJUCK			BURRINJUCK EFFECTIVE STORAGE VOLUME > 50% FULL SUPPLY VOLUME OF BURRINJUCK		
	WET	NORMAL	DRY	WET	NORMAL	DRY	WET	NORMAL	DRY	
18-JUN	72	60	33	72	60	33	72	60	33	
19-JUN	66	61	34	66	61	34	66	61	34	
20-JUN	59	62	34	59	62	34	59	62	34	
21-JUN	52	63	35	52	63	35	52	63	35	
22-JUN	45	64	36	45	64	36	45	64	36	
23-JUN	37 29	64 65	37 37	37 29	64 65	37 37	37 29	64 65	37 37	
24-JUN 25-JUN	20	66	38	20	66	38	20	66	38	
26-JUN	11	67	39	11	67	39	11	67	39	
27-JUN	1	68	39	1	68	39	1	68	39	
28-JUN	0	69	40	0	69	40	0	69	40	
29-JUN	0	69	40	0	69	40	0	69	40	
30-JUN	0	70	41	0	70	41	0	70	41	
01-JUL	0	71	41	0	71	41	0	71	41	
02-JUL	0	72	42	0	72	42	0	72	42	
03-JUL	0	72	42	0	72	42	0	72	42	
04-JUL 05-JUL	0	73 74	43 43	0	73 74	43	0	73 74	43 43	
06-JUL	0	75	44	0	75	44	0	75	44	
07-JUL	0	75	44	0	75	44	0	75	44	
08-JUL	0	76	45	0	76	45	0	76	45	
09-JUL	0	77	45	0	77	45	0	77	45	
10-JUL	0	77	45	0	77	45	0	77	45	
11-JUL	0	78	46	0	78	46	0	78	46	
12-JUL	0	79	46	0	79	46	0	79	46	
13-JUL	0	79	46	0	79	46	0	79	46	
14-JUL	0	80 80	46 47	0	80 80	46	0	80 80	46 47	
15-JUL 16-JUL	0	81	47	0	81	47	0	81	47	
17-JUL	0	81	47	0	81	47	0	81	47	
18-JUL	0	82	47	0	82	47	0	82	47	
19-JUL	0	82	47	0	82	47	0	82	47	
20-JUL	0	83	47	0	83	47	0	83	47	
21-JUL	0	83	47	0	83	47	0	83	47	
22-JUL	0	84	47	0	84	47	0	84	47	
23-JUL	0	84	47	0	84	47	0	84	47	
24-JUL	0	84	47	0	84	47	0	84	47	
25-JUL 26-JUL	0	85 85	47 47	0	85 85	47 47	0	85 85	47 47	
27-JUL	0	86	47	0	86	47	0	86	47	
28-JUL	0	86	46	0	86	46	0	86	46	
29-JUL	0	86	46	0	86	46	0	86	46	
30-JUL	0	86	46	0	86	46	0	86	46	
31-JUL	0	87	46	0	87	46	0	87	46	
01-AUG	0	87	45	0	87	45	0	87	45	
02-AUG	0	87	45	0	87	45	0	87	45	
03-AUG	0	87	45	0	87	45	0	87	45	
04-AUG	0	87	44	0	87	44	0	87	44	
05-AUG 06-AUG	0	87 88	44 43	0	87 88	44	0	87 88	44	
00-AUG	0	88	43	0	88	43	0	88	43	
08-AUG	0	88	42	0	88	42	0	88	42	
09-AUG	0	88	41	0	88	41	0	88	41	
10-AUG	0	88	41	0	88	41	0	88	41	
11-AUG	0	88	40	0	88	40	0	88	40	
12-AUG	0	88	39	0	88	39	0	88	39	
13-AUG	0	88	39	0	88	39	0	88	39	
14-AUG	0	87	38	0	87	38	0	87	38	
15-AUG	0	87	37	0	87	37	0	87	37	
16-AUG	0	87 87	36 35	0	87 87	36 35	0	87	36 35	
17-AUG 18-AUG	0	87 87	34	0	87	35	0	87 87	35	

DATE	VOLU	JUCK EFFECTI IME < 30% FUI LUME OF BURF	L SUPPLY	30% FULL SUPPLY VOLUME OF BURRINJUCK < BURRINJUCK EFFECTIVE STORAGE VOLUME < 50% FULL SUPPLY VOLUME OF BURRINJUCK			BURRINJUCK EFFECTIVE STORAGE VOLUME > 50% FULL SUPPLY VOLUME OF BURRINJUCK		
	WET	NORMAL	DRY	WET	NORMAL	DRY	WET	NORMAL	DRY
19-AUG	0	86	33	0	86	33	0	86	33
20-AUG	0	86	32	0	86	32	0	86	32
21-AUG	0	86	31	0	86	31	0	86	31
22-AUG	0	86	30	0	86	30	0	86	30
23-AUG	0	85	29	0	85	29	0	85	29
24-AUG	0	85	28	0	85	28	0	85	28
25-AUG	0	84	26	0	84	26	0	84	26
26-AUG	0	84	25	0	84	25	0	84	25
27-AUG	0	84	24	0	84	24	0	84	24
28-AUG	0	83	22	0	83	22	0	83	22
29-AUG	0	82	21 19	0	82	21	0	82 82	21
30-AUG	0	82 81		0	82	19	0		19
31-AUG	0	81	18 16	0	81 81	18 16	0	81 81	18 16
01-SEP 02-SEP	0	80	15	0	80	15	0	80	15
02-SEP 03-SEP	0	79	13	0	79	13	0	79	13
03-SEP 04-SEP	0	79 79	11	0	79	11	0	79	11
05-SEP	0	78	9	0	78	9	0	78	9
06-SEP	0	77	8	0	77	8	0	77	8
07-SEP	0	76	6	0	76	6	0	76	6
08-SEP	0	75	4	0	75	4	0	75	4
09-SEP	0	74	2	0	74	2	0	74	2
10-SEP	0	73	0	0	73	0	0	73	0
11-SEP	0	72	0	0	72	0	0	72	0
12-SEP	0	71	0	0	71	0	0	71	0
13-SEP	0	70	0	0	70	0	0	70	0
14-SEP	0	69	0	0	69	0	0	69	0
15-SEP	0	68	0	0	68	0	0	68	0
16-SEP	0	67	0	0	67	0	0	67	0
17-SEP	0	66	0	0	66	0	0	66	0
18-SEP	0	65	0	0	65	0	0	65	0
19-SEP	0	63	0	0	63	0	0	63	0
20-SEP	0	62	0	0	62	0	0	62	0
21-SEP	0	61	0	0	61	0	0	61	0
22-SEP	0	59	0	0	59	0	0	59	0
23-SEP	0	58 57	0	0	58 57	0	0	58	0
24-SEP	_	7.1		ŭ		0	•	57	0
25-SEP 26-SEP	0	55 54	0	0	55 54	0	0	55 54	0
27-SEP	0	52	0	0	52	0	0	52	0
28-SEP	0	50	0	0	50	0	0	50	0
29-SEP	0	49	0	0	49	0	0	49	0
30-SEP	0	47	0	0	47	0	0	47	0
01-oct	0	45	0	0	45	0	0	45	0
02-oct	0	44	0	0	44	0	0	44	0
03-oct	0	42	0	0	42	0	0	42	0
04-oct	0	40	0	0	40	0	0	40	0
05-ост	0	38	0	0	38	0	0	38	0
06-ост	0	36	0	0	36	0	0	36	0
07-ост	0	34	0	0	34	0	0	34	0
08-ост	0	32	0	0	32	0	0	32	0
09-ост	0	30	0	0	30	0	0	30	0
10-oct	0	28	0	0	28	0	0	28	0
11-oct	0	26	0	0	26	0	0	26	0
12-oct	0	24	0	0	24	0	0	24	0
13-oct	0	21	0	0	21	0	0	21	0
14-OCT	0	19	0	0	19	0	0	19	0
15-OCT	0	17	0	0	17	0	0	17	0
16-oct	0	14	0	0	14	0	0	14	0
17-OCT	0	12	0	0	12	0	0	12	0
<u>18-ост</u> 19-ост	0	9 7	0	0	9 7	0	0	7	0

DATE	BURRINJUCK EFFECTIVE STORAGE VOLUME < 30% FULL SUPPLY VOLUME OF BURRINJUCK			30% FULL SUPPLY VOLUME OF BURRINJUCK < BURRINJUCK EFFECTIVE STORAGE VOLUME < 50% FULL SUPPLY VOLUME OF BURRINJUCK			BURRINJUCK EFFECTIVE STORAGE VOLUME > 50% FULL SUPPLY VOLUME OF BURRINJUCK		
	WET	NORMAL	DRY	WET	NORMAL	DRY	WET	NORMAL	DRY
20-ост	0	4	0	0	4	0	0	4	0
21-oct	0	2	0	0	2	0	0	2	0



Appendix 1 Overview map of the Murrumbidgee Regulated River Water Source



