

Water Sharing Plan for the Belubula Regulated River Water Source 2012 (Proposed amendments 2019)

Minister's note.

A new template is being applied to Murray-Darling Basin regulated river water sharing plans that are prepared as part of the Water Resource Plan process. However, this plan will largely remain in its current form, given that it is due for remake in 2022. The latest template will be applied when the plan is remade.

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Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Belubula Regulated River Water Source 2012* (hereafter *this Plan*).

2 Nature and status of this Plan

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

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

3 Commencement of this Plan

This Plan commences on the 4th October 2012.

Notes.

- 1 In accordance with section 43 of the Act, this Plan will have effect for 10 years from 1 July 2013.
- 2 Under the Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin and the associated National Partnership Agreement, NSW agreed to develop water resource plans for Murray-Darling Basin water resources consistent with the requirements of the *Basin Plan 2012*, made under the *Water Act 2007* of the Commonwealth. This Plan was amended in 2019, partly to meet NSW's commitments under these agreements. The water resource plan for the Lachlan surface water area commences on 1 July 2019. Provisions of this Plan form part of that water resource plan. .

4 Application of this Plan

- (1) This Plan applies to the following water source known as the Belubula Regulated River Water Source (hereafter *this water source*) within the Lachlan Water Management Area.

Note. The Lachlan Water Management Area was constituted by Ministerial order made under section 11 of the *Water Management Act 2000* and published in the NSW Government Gazette No 180 on 23 November 2001 at page 9389.

- (2) (Repealed)
- (3) This water source consists of:
 - (a) the water between the banks of all rivers, from the Carcoar Dam water storage, downstream to the junction with the Lachlan River, that have been declared by the Minister to be a regulated river, and
 - (b) floodplain harvesting in connection with extractions under access licences with a share component that specifies this water source.

Notes.

- 1 The *Regulated River Order for the Lachlan Regulated River* was made by the Minister and published in the NSW Government Gazette No 92 on 14 September 2012 at page 3955 and amended by item [89] of Schedule 1 of the *Water Management Amendment Act 2018*.
 - 2 An overview map of the Lachlan Regulated River is shown in Appendix 1.
 - 3 **floodplain harvesting** is defined in the Dictionary.
- (4) This water source does not apply to water:
- (a) contained in the Lachlan Unregulated River Water Sources to which the *Water Sharing Plan for the Lachlan Unregulated River Water Sources 2012* applies, and
 - (b) taken under a floodplain harvesting access licence with a share component that specifies a water source to which this Plan does not apply, and
 - (c) contained in the Lachlan Alluvial Water Sources to which the *Water Sharing Plan for the Lachlan Alluvial Groundwater Sources 2019* applies.

5 Understanding the rules in this Plan

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

6 Interpretation

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

Part 2 Vision, objectives, strategies and performance indicators

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

7 Vision statement

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

- (a) the health and enhancement of this 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.

7A Acknowledgement

Respect is paid to the Traditional Owners of this country, who are acknowledged as the first natural resource managers within this water source.

8 Environmental objectives

- (1) The broad environmental objective of this Plan is to protect and, where possible, enhance the ecological condition of this water source and its water dependent ecosystems (instream, riparian and floodplain ecosystems).

Note. The ecological condition of this water source includes high ecological value aquatic ecosystems, target species, communities, populations and key ecosystem functions as defined in Appendix 2.

- (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 of target ecological populations including native fish and native vegetation,

Note. Criteria for identifying priority monitoring locations of target ecological populations for the water source are defined in Appendix 2.

- (ii) the population structure of target ecological populations including native fish and native vegetation communities,

Note. Target ecological populations for this water source are defined in Appendix 2.

- (iii) the connectivity between and within water sources, including to support surface and groundwater exchange and downstream processes including priority carbon and nutrient pathways and priority fish passages,

Notes.

- 1 **carbon and nutrient pathways** is defined in the Dictionary.

- 2 Criteria for identifying priority carbon and nutrient transport pathways, and priority fish passages in these water sources is defined in Appendix 2.
- 3 Downstream processes may include maintaining connectivity with downstream water sources.

(iv) water quality within the water source to support water dependent ecosystems and ecosystem functions,

Notes.

- 1 Water quality targets for the water source are defined in the *Water quality management plan for the Lachlan water resource plan area (SW10)*.
- 2 Criteria for identifying priority monitoring locations for water quality measurables are defined in Appendix 2.

(3) The strategies for reaching the environmental objectives of this Plan are the following:

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

Notes.

- 1 Part 7 of this Plan reserves all water remaining above the long-term average annual extraction limit and cumulative annual extraction limit for the environment.
- 2 This strategy will contribute to all objectives in subclause (2)

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

Notes.

- 1 **flow regimes** is defined in the dictionary
- 2 The rules in clause 26 of this Plan outline environmental water release rules from Carcoar Dam that help mitigate alterations to the natural flow regime of this water source. These rules contribute to all the objectives in subclause (2).
- 3 The rules in clauses 47, 48 and 49 of this Plan outline limits to the taking of uncontrolled flows and taking of water under high security, general security and supplementary water access licences, respectively. These rules contribute to all objectives in subclause (2).

(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 rules in clause 26, 33, 47, 48 and 49 of this Plan maintain the hydrological connectivity by ensuring a portion of medium and high natural flows are protected. These rules contribute to all objectives in subclause (2).

(d) reserve a share of natural flows for the maintenance of water quality.

Notes.

- 1 The rules in clause 26 of this Plan outline environmental water release rules from Carcoar Dam that help mitigate alterations to the natural flow regime of this water source. These rules contribute to all objectives in subclause (2).
- 2 The rules in clauses 47, 48 and 49 of this Plan outline limits to the taking of uncontrolled flows and taking of water under high security, general security and supplementary water access licences, respectively. These rules contribute to all objectives in subclause (2).

(4) The performance indicators used to measure the success of the strategies for reaching the

broad environmental objective in subclause (1) will be evaluated by determining the extent to which:

- (a) the combined outcomes of the targeted objectives in subclause (5) have contributed to achieving the broad objective, and
 - (b) external influences on this water source during the term of this Plan have affected progress toward achieving the broad objective.
- (5) The performance indicators used to measure the success of the strategies for reaching the targeted environmental objectives in subclause (2) are the changes or trends in ecological condition during the term of this Plan, including the changes or trends in the following:
- (a) the recorded range or extent of target ecological populations, including native fish and native vegetation,
 - (b) the recorded condition of target ecological populations including native fish and native vegetation,
 - (c) measurements of carbon and nutrient transport processes 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 strategies in subclause (3) have provided flow conditions of sufficient magnitude, frequency, timing and water quality to achieve targeted environmental objectives.
- Note.** The priority performance indicators to measure targeted environmental objectives, and the corresponding strategies and rules to achieve them, are described in Appendix 2.
- (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.

9 Economic objectives

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

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

- (b) to maintain or enhance access to water for agriculture, business and landholders,
- (c) to contribute to maintaining water quality for agriculture, business and landholders.

(3) The strategies for reaching the 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 rules in Division 1 of Part 9 and priority of extraction rules in clause 46 provide certainty in how water is to be shared between individual access licence holders and different categories of access licences. These rules contribute to all of the objectives in subclause (2).

- (b) where possible, provide for flexibility of access to water,

Note. The individual account management rules in clause 45, provide some flexibility that reflects the characteristics of the licence category. These rules contribute to the objective in subclause (2) (b).

- (c) manage extractions to the long-term average annual extraction limit and the cumulative annual extraction limit, and provide rules for managing extractions within those limits that recognise different climatic conditions in different years, including during drought,

Note. The application of the long-term average annual extraction limit and the cumulative annual extraction limit and the assessment and compliance rules in Part 7 of this Plan manage extractions to different climatic conditions in different years. These rules contribute to the objective in subclause (2) (b).

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

Note. The rules in Part 10 of this Plan permit a variety of dealings within environmental and system constraints, including assignment of rights under access licences, assignment of water allocations between access licences and the ability to move the share component of an access licence from one water source to another. These rules contribute to the objective in subclause (2) (a).

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

Notes.

- 1 The rules in clause 26 of this Plan outline environmental water release rules from Carcoar Dam that help mitigate alterations to the natural flow regime of this water source. These rules contribute to all objectives in subclause (2).
- 2 The rules in clauses 47, 48 and 49 of this Plan outline limits to the taking of uncontrolled flows and taking of water under high security, general security and supplementary water access licences, respectively. These rules contribute to all objectives in subclause (2).

(4) The performance indicators used to measure the success of the strategies for reaching the broad economic objective in subclause (1) will be evaluated by determining the extent to which:

- (a) the combined outcomes of the targeted economic objectives in subclause (5) have contributed to achieving the broad objective, and
 - (b) 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.
- (5) The performance indicators used to measure the success of the strategies for reaching the targeted economic objectives in subclause (2) are the changes or trends in economic benefits, including the changes or trends in the following:
- (a) the economic benefits of water extraction and use, by measuring factors including the movement of water to higher value uses,
 - (b) the economic benefits of water trading including changes or trends in the following:
 - (i) the 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 annual total number of access licence shares subject to a dealing,
 - (iv) the weighted average price of water traded within the water source,
Note. *weighted average price* is defined in the Dictionary.
 - (c) the recorded values of water quality measurements including salinity, sodium adsorption ratio, harmful algal blooms, total nitrogen, total phosphorus, pH, and dissolved oxygen.
- (6) In evaluating the effectiveness of the strategies in meeting the objectives of this clause, the following will be relevant:
- (a) the extent to which stakeholders have considered the operation of this Plan to be clearly explained and predictable,
 - (b) 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.
Note. The process for determining the priority for monitoring the targeted economic objectives, and the corresponding strategies and rules to achieve them, are described in Appendix 2.

10 Aboriginal cultural objectives

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

- (2) The targeted Aboriginal cultural objectives of this Plan are as follows:
- (a) to provide access to water in the exercise of native title rights,
 - (b) to provide access to water for Aboriginal cultural use, including fishing,
Note. Relevant fish species may include golden perch and Murray cod.
 - (c) to protect identified water-dependent culturally significant areas, including important riparian vegetation communities,
 - (d) to maintain or enhance water quality to ensure suitability of water for Aboriginal cultural use.
- (3) The strategies for reaching the Aboriginal cultural objectives of this Plan are the following:
- (a) manage access to water consistently with the exercise of native title rights,
 - (b) provide for water associated with Aboriginal cultural values and uses,
Note. The rules in Part 8 of this Plan provide opportunities for Aboriginal people to access water by allowing for the granting of an access licence of the subcategory 'Aboriginal cultural'. This rule contributes to the objective in subclause (2) (b).
 - (c) reserve a portion of natural flows to mitigate alterations to natural flow regimes in this water source,
Notes.
 - 1 **flow regimes** is defined in the dictionary
 - 2 The rules in clause 26 of this Plan outline environmental water release rules from Carcoar Dam that help mitigate alterations to the natural flow regime of this water source. These rules contribute to all the objectives in subclause (2).
 - 3 The rules in clauses 47, 48 and 49 of this Plan outline limits to the taking of uncontrolled flows and taking of water under high security, general security and supplementary water access licences, respectively. These rules contribute to all objectives in subclause (2).
 - (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 rules in clauses 26, 33, 47, 48 and 49 of this Plan maintain the hydrological connectivity by ensuring a portion of medium and high natural flows are protected. These rules contribute to all objectives in subclause (2).
 - (e) provide for Aboriginal values to be considered as part of the broader environmental watering events.
Note. The objectives in clause 8 of this Plan include: protect, preserve, maintain and enhance the Aboriginal, cultural and heritage values of this water source. This objective contribute to the objectives in subclause (2) (b), (c) and (d).
- (4) The performance indicators used to measure the success of the strategies for reaching the broad Aboriginal cultural objective in subclause (1) will be evaluated by determining the extent to which:

- (a) the combined outcomes of the targeted Aboriginal cultural objectives in subclause (5) have contributed to achieving the broad objective, and
- (b) external influences on this water source during the term of this Plan have affected progress toward achieving the broad objective.

Note. External influences may include trends in urban, agricultural and industrial development, Aboriginal cultural activity, changes in climate, policy or regulation. The performance indicators in clause 10 of this Plan include: the extent of recognition of spiritual, social and customary values of water to Aboriginal peoples.

- (5) The performance indicators used to measure the success of the strategies for 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 that are important for recreational fishing,
 - (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 peoples 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,
 - (h) by the extent of recognition of spiritual, social and customary values of water to Aboriginal peoples.

10A Social and cultural objectives

- (1) The broad social and cultural objectives of this Plan are to maintain or enhance the efficient and sustainable access to water to support basic human needs, and water dependant values, culture, heritage and recreational uses.
- (2) The targeted social and cultural objectives of this Plan are to maintain or improve:
 - (a) access to water for basic 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 for basic human needs, town water supply, domestic and stock purposes and water dependent cultural, heritage and recreational uses, including recreational fishing.
- (3) The strategies for reaching the social and cultural objectives of this Plan are as follows:
 - (a) provide water access for basic human needs, town water supply, domestic and stock purposes and for native title rights,

Note. Part 6 of this Plan ensures that water is available for basic human needs, town water supply and domestic and stock purposes and native title rights. These rules contribute to the objective in subclause (2) (a).
 - (b) reserve a portion of natural flows to mitigate alterations to natural flow regimes in this water source,

Notes.

 - 1 The rules in clause 26 of this Plan outline environmental water release rules from Carcoar Dam that help mitigate alterations to the natural flow regime of this water source. These rules contribute to all objectives in subclause (2).
 - 2 The rules in clauses 47,48 and 49 of this Plan outline limits to the taking of uncontrolled flows and taking of water under high security, general security and supplementary water access licences, respectively. These rules contribute to all objectives in subclause (2).
 - (c) reserve a portion of natural flows to maintain hydrological connectivity between this water source and riparian zones, wetlands and floodplains connected to this water source, and

Note. The rules in clause 26 of this Plan maintain the hydrological connectivity between this water source and riparian zones, wetlands and floodplains connected to this water source by ensuring a portion of medium and high natural flows are protected. These rules contribute to all the objectives in subclause (2).
 - (d) minimise adverse impacts of water delivery on community values and uses.

Note. The rules for water delivery and channel capacity constraints, rates of change to storage releases, supply of orders when remaining allocations are low and dam operation

during floods and spills in Part 6 of this Plan minimise the impact of water delivery on the community. These rules contribute to all the objectives in subclause (2).

- (4) The performance indicators used to measure the success of the strategies for reaching the broad social and cultural objectives in subclause (1) will be evaluated by determining the extent to which:
- (a) the combined outcomes of the targeted social and cultural objectives in subclause (5) have contributed to achieving the broad objective, and
 - (b) external influences on this water source during the term of this Plan have affected progress toward achieving the broad objective.
- Note.** External influences may include trends in urban, agricultural and industrial development, social or cultural behaviour, climate and changes in policy or regulation.
- (5) The performance indicators used to measure the success of the strategies for reaching the targeted social and cultural objectives in subclause (2) will be evaluated as follows:
- (a) by comparing changes, or trends in, the social and cultural uses of water during the term of this Plan by measuring:
 - (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 considering 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,
 - (e) 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,
 - (f) by the extent of recognition of spiritual, social and customary values of water to Aboriginal peoples.

Part 3 Bulk access regime

11 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:
 - (a) the environmental water rules established in Part 4 of this Plan,
 - (b) the requirements for water for basic landholder rights identified in Division 2 of Part 5 of this Plan,
 - (c) the requirements for water for extraction under access licences identified in Division 3 of Part 5 of this Plan, and
 - (d) the access licence dealing rules established in Part 10 of this Plan.
- (2) The bulk access regime established in this Plan for this water source:
 - (a) recognises and is consistent with the limits to the availability of water set in relation to this water source contained in Division 1 of Part 7 of this Plan,
 - (b) establishes rules according to which access licences are to be granted and managed contained in Parts 8 and 9 of this Plan and available water determinations to be made contained in Division 2 of Part 7 of this Plan,
 - (c) recognises the effect of climatic variability on the availability of water as described in clause 12,
 - (d) establishes rules with respect to the priorities according to which water allocations are to be adjusted as a consequence of any reduction in the availability of water due to an increase in average annual extraction against the long-term average annual extraction limit, contained in Division 1 of Part 7 of this Plan,
 - (e) contains provisions with respect to the conditions that must be imposed as mandatory conditions on access licences contained in Division 2 of Part 11 of this Plan, and
 - (f) recognises and is consistent with the water management principles contained in section 5 of the Act.

12 Climatic variability

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

- (a) manage the sharing of water in this water source within the limits of water availability on a long-term average annual basis and the priorities according to which water allocations are to be adjusted as a consequence of any reductions in

the availability of water due to an increase in average annual extraction against the long-term average annual extraction limit, contained in Division 1 of Part 7 of this Plan, and

- (b) manage the sharing of water between categories of access licences on an annual basis in this water source, contained in Division 2 of Part 7 of this Plan.

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

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Part 4 Planned environmental water provisions

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

13 General

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

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.

14 Commitment and identification of planned environmental water

Water is committed and identified as planned environmental water in this water source in the following ways:

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

15 Establishment and maintenance of planned environmental water

(1) This Plan establishes planned environmental water in this water source as follows:

- (a) the physical presence of water resulting from:
 - (i) the environmental release rules from Carcoar Dam as specified in clause 26 of this Plan,

Note. The rules in clause 26 ensure that a minimum flow target will be maintained when the volume of water in Carcoar Dam is at varying storage levels.
 - (ii) the limitations on access to uncontrolled flows for regulated river (high security) access licences as specified in clause 47 and for regulated river (general security) access licences as specified in clause 48 of this Plan, and
 - (iii) the limitations on access to flows for supplementary water access licences as specified in clause 49 of this Plan,
- (b) the long-term average annual commitment of water as planned environmental water resulting from compliance with the long-term average annual extraction limit as specified in clause 36 of this Plan, and

- (c) the water remaining after water has been taken under basic landholder rights and access licences, in accordance with the rules specified in Parts 7 and 9 of this Plan.
- (2) The planned environmental water established under subclause (1) (a) is maintained by the environmental release rules from Carcoar Dam as specified in clause 26, the limitations on access to uncontrolled flows for regulated river (high security) and regulated river (general security) access licences as specified in clauses 47 and 48, and the limitations on access to flows for supplementary water access licences as specified in clause 49.
- (3) The planned environmental water established under subclause (1) (b) is maintained by the rules specified in Division 1 of Part 7 of this Plan.
- (4) The planned environmental water established under subclause (1) (c) is maintained by the rules specified in Division 1 of Part 7 and Part 9 of this Plan.

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

Part 5 Requirements for water

Division 1 General

16 Application

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

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

- (a) the grant, surrender or cancellation of access licences in this water source,
- (b) the variation of local water utility licences under section 66 of the Act, or
- (c) changes due to the volumetric conversion of *Water Act 1912* entitlements that are currently non-volumetric.

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.

17 Domestic and stock rights

At the commencement of this Plan, the water requirements of persons entitled to domestic and stock rights in this water source are estimated to total 0.55 megalitres per day (hereafter *ML/day*).

Notes.

- 1 Domestic and stock rights are set out in Division 1 of Part 1 of Chapter 3 of the Act and must be exercised in accordance with any mandatory guidelines established under the Act with respect to the taking and use of water for domestic consumption or stock watering.
- 2 Inherent water quality and land use activities may make the water in some areas unsuitable for human consumption. Water from this water source should not be consumed without first being tested and, if necessary, appropriately treated. Such testing and treatment is the responsibility of the water user.

18 Native title rights

At the commencement of this Plan, no determinations of native title have been made in relation to this water source under the *Native Title Act 1993* of the Commonwealth. Therefore, on the commencement of this Plan, no water requirements have been identified for native title holders.

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

19 (Repealed)

Division 3 Requirements for water for extraction under access licences

20 Share component of domestic and stock access licences

It is estimated that at the time of commencement of this Plan the share components of domestic and stock access licences authorised to take water from this water source total 233 megalitres per year (*ML/year*).

21 Share component of local water utility access licences

It is estimated that at the time of commencement of this Plan the share components of local water utility access licences authorised to take water from this water source total 0 ML/year.

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

It is estimated that at the time of commencement of this Plan the share components of regulated river (high security) access licences authorised to take water from this water source total 1,095 unit shares.

23 Share component of regulated river (general security) access licences

It is estimated that at the time of commencement of this Plan the share components of regulated river (general security) access licences authorised to take water from this water source total 22,766 unit shares.

24 Share component of supplementary water access licences

It is estimated that at the time of commencement of this Plan the share components of supplementary water access licences authorised to take water from this water source total 3,125 unit shares.

Part 6 System operation requirements

25 General

The rules in this Part apply to the Belubula Regulated River Water Source.

26 Environmental release rules for Carcoar Dam

- (1) The water supply system in this water source will be managed by the operator to maintain a flow at the Helensholme gauge (412033) of 10 ML/day.
- (2) To achieve subclause (1), the operator must set aside sufficient volumes of water from inflows into this water source and in reserves held in Carcoar Dam.
- (3) Water reserved in Carcoar Dam under subclause (2) must be released by the operator when necessary to meet the requirements of subclause (1).

Note: *operator* is defined in the Dictionary.

Minister's note.

Recent drought conditions in the Belubula River have shown that the current end of system (EOS) flow requirement is not achievable during periods of prolonged drought, leading to suspensions of that flow when antecedent conditions have been persistently dry.

A new eWater Source model for the Belubula Regulated River has been developed and is being used to assess rule change options that better suit the characteristics of this system.

While some proposed changes relating to the protection and enhancement of planned environmental water have been settled through consultation with the Stakeholder Advisory Panel (i.e. some accounting and uncontrolled flow access rule adjustments), no optimal solutions have been identified as yet for the EOS flow or first flush protection.

Accordingly, it is proposed to retain the current EOS flow rule in the water sharing plan and undertake further work to identify the best combination of rules (accounting rules, EOS flow rules, daily access rules, etc.) to suit the Belubula River system. The additional modelling and analysis can be done by 2021 and the outcomes used to inform possible amendments to the Plan at the time of its remake in 2022. An amendment provision has been included in Part 12 in case a suitable combination of rules is developed prior to 2022.

The additional work that will be undertaken includes:

- establishing an agreed base case scenario,
- identifying clear and specific objectives for the rule change/s,
- using the new eWater Source system model to assess alternative scenarios,
- identifying all risks for environmental water and water users,
- modelling the potential impacts of the combination of rule changes, and
- considering the links between different rules, such as the effects of the proposed changes to uncontrolled flow access.

27 Water delivery and channel constraints

Where necessary for determining numerical extraction components, managing water releases or providing water under access licences, the maximum water delivery or operating channel capacity in this water source or in any section of this water source will be determined and specified in accordance with procedures established by the Minister, taking into account:

- (a) 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, and
- (d) capacities of water management structures controlled by the Minister.

Note. There are no defined channel constraints at the commencement of this Plan.

28 Rates of change to storage releases

Rules regarding rates of change to releases from Carcoar Dam may be specified by the Minister in accordance with any procedures that the Minister establishes taking into account:

- (a) relevant environmental considerations,
- (b) damage to river banks,
- (c) public safety, and
- (d) any other matters considered relevant by the Minister.

29 Supply order when remaining allocations are low

- (1) If, in the Minister's opinion, the total remaining volume of water in access licence water allocation accounts has been reduced to a level where the continuous delivery of water orders would involve unacceptably high delivery losses, then if water ordering has been imposed on access licence holders, water orders may be grouped and released by the operator periodically.
- (2) The operator may consult with irrigation industry representatives regarding the circumstances under which action under subclause (1) should be taken and the manner of management.

Note. During the course of an extended drought, the implementation of the above provisions may result in short term ordering delays.

30 Dam operation during floods and spills

- (1) The operation of Carcoar Dam during times of flood and spilling of water is to be undertaken in a manner that maintains the safety of dam infrastructure by the operator.

- (2) Providing it is consistent with subclause (1), the operator:
 - (a) must leave the storage as full as possible at the completion of the flood or spilling of water, and
 - (b) must aim to lessen downstream flood damage where possible.

31 Maintenance of water supply

- (1) The water supply system in this water source must be managed by the operator so that:
 - (a) it would be capable of maintaining supply to those exercising domestic and stock rights and native title rights in this water source through a repeat of the worst period of low inflows into this water source for at least two years, as represented by historical flow information held by the Department when this Plan commenced, and
 - (b) available water determinations for domestic and stock access licences and local water utility access licences of 100% of the share components can be maintained through a repeat of the worst period of low inflows into this water source, as represented by historical flow information held by the Department when this Plan commenced, and
 - (c) available water determinations for regulated river (high security) access licences of 1 ML per unit share can be maintained through a repeat of the worst period of low inflows into this water source, as represented by historical flow information held by the Department when this Plan commenced.
- (2) To achieve subclause (1) (a), a minimum daily release of 2 ML/day must be made from Carcoar Dam.
- (3) To achieve subclauses (1) and (2), sufficient volumes of water must be set aside from inflows into this water source and in reserves held in Carcoar Dam to supply allocated water for at least two years.

Notes.

- 1 As at 1 July 2019, reserves in Carcoar Dam can only guarantee delivery of water in access licence water allocation accounts for two years. If dry conditions extend for longer than two years, then delivery of all water in access licence water allocation accounts cannot always be made.
- 2 During the course of an extended drought, the Incidence Response Guide applies, outlining how the water source should be managed during an extreme event. Every attempt will be made to maintain the operation of this Plan, however some rules and operating practices may require suspension of some parts to meet critical human water needs.

Part 7 Limits to the availability of water

Note. This Part sets out the rules for managing the availability of water for extraction on a long-term basis in accordance with a long-term average annual extraction limit.

Division 1 Long-term average annual extraction limit

32 General

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

33 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 this water source in accordance with this clause.
- (2) The long-term average annual extraction limit is the average annual extraction calculated over the duration of available climate records using the hydrological computer model approved by the Minister, based on the following:
 - (a) the water storages and water use development that existed in 2009/2010,
Note. *Water use development* is defined in the Dictionary.
 - (b) the share components of water access licences and annual water requirements pursuant to basic landholder rights existing at the commencement of this Plan,
 - (c) the rules defined in this Plan, at the commencement of this Plan,
Note. The rules referred to in paragraph (c) include any rules within this Plan that impact on the amount of water that can be extracted, or conditions under which water may be extracted from the Belubula Regulated River Water Source, including the environmental release rules in Part 6 of this Plan and access rules in Division 2 of Part 9 of this Plan.
 - (d) the level of development for commercial plantations that existed on 30 June 2009, and
 - (e) floodplain harvesting extractions determined by the Minister to have been taken for use in connection with access licences with a share component that specifies this water source.

Notes.

- 1 The volume of the long-term average annual extraction limit is equal to the volume specified in Schedule 3 to the Basin Plan item 13 (Lachlan SDL Resource Unit), as it relates to this water source. The sustainable diversion limit for the Lachlan SDL Resource Unit also includes extraction under the *Water Sharing Plan for the Lachlan Regulated River Water Source 2016* and the *Water Sharing Plan for the Lachlan Unregulated Water Sources 2012*.
 - 2 An assessment of the long-term average annual extraction that would result from conditions specified in subclause (1) has been made using the Belubula Cap IQQM computer model with system file lachw106.sqq. This indicates a long-term average annual extraction volume of 7.37 gigalitres at the commencement of this Plan.
- (3) (Repealed)

34 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 in that water year,
- (b) all water taken by holders of all categories of access licence in that water year,
- (c) all water taken pursuant to domestic and stock rights and native title rights in that water year,
- (d) the level of development for commercial plantations in that water year,
- (e) if not included under subclause (b), floodplain harvesting extractions determined by the Minister to have been taken for use in connection with access licences with a share component that specifies this water source in that water year.

35 Assessment of compliance with extraction limits

- (1) After the end of each water year, the following assessments of compliance with extraction limits are to be conducted for this water source:
 - (a) an assessment of compliance with the long-term average annual extraction limit in accordance with subclauses (2) and (3),
 - (b) an assessment of compliance with the Basin Plan long-term annual diversion limit in accordance with subclause (4).

Note: *Basin Plan* is defined in the Dictionary.

- (2) Following the calculations under clauses 33 and 34, the Minister is to compare average annual extractions against the long-term average annual extraction limit.
- (3) The comparison referred to in subclause (2) is to be undertaken as follows:
 - (a) at the commencement of each water year after the first water year in which this Plan has effect, the average of annual total extractions for the preceding ten water years (including years prior to the commencement of this Plan) are to be compared to the average modelled annual extractions for the same period under the long-term average annual extraction limit conditions referred to in clause 33,
 - (b) if the average of annual total extractions for the preceding ten water years exceeds the average modelled total annual extractions for the same period under the long-term average annual extraction limit conditions referred to in clause 33 by more than 10% then a further assessment will be undertaken,

- (c) the further assessment referred to in paragraph (b) will be based on a comparison of the long-term average annual modelled extractions under current conditions and long-term average annual extraction limit conditions as set out in clause 34,
 - (d) to assess the long-term average annual modelled extractions for current conditions under paragraph (c) the model will be set to represent as close as possible all water use development, supply system management and other factors affecting the long-term average annual extraction volume from this water source at the time of assessment.
- (4) An assessment of compliance with the Basin Plan long-term annual diversion limit is to be conducted for this water source in accordance with the processes set out in Division 3 of Part 4 of Chapter 6 of the Basin Plan, as if those processes relate only to this water source.

36 Action following non-compliance

- (1) There is non-compliance with a limit:
 - (a) if the comparison under clause 35 (3) (b) to (d) demonstrates that modelled long-term average annual extractions from this water source exceeds the long-term average annual extraction limit by 3% or more, or
 - (b) in the circumstances set out in Division 2 of Part 4 of Chapter 6 of the Basin Plan.
- (2) If there is non-compliance with a limit, the Minister may:
 - (a) reduce the maximum available water determination that can be made for supplementary water access licences under clause 43, and
 - (b) reduce the take limit for regulated river (general security) access licences under clause 45 (3B).
- (3) Any reductions under subclause (2) must be:
 - (a) to the extent that the Minister considers necessary to return long-term average annual extractions to the long-term average annual extraction limit, and
 - (b) made in the same amount under subclause (2) (a) as the amount under subclause (2) (b).
- (4) (Repealed)

37 (Repealed)

Division 2 Available water determinations

38 General

- (1) Available water determinations for access licences with share components that specify this water source are to be expressed as either:
 - (a) a percentage of share component for access licences where share components are specified as ML/year, or
 - (b) megalitres per unit share for access licences where share components are specified as a number of unit shares.
- (2) The sum of available water determinations made for any access licence with a share component that specifies this water source must not, in any water year, exceed:
 - (a) 100% of the access licence share component or such lower amount that is determined under Division 1 of this Part, for all access licences where share components are specified as ML/year,
 - (b) 1 ML per unit share of the access licence share component, for all regulated river (high security) access licences, or
 - (c) 1 ML per unit share of the access licence share component or such lower amount that is determined under Division 1 of this Part, for all supplementary water access licences.

39 Available water determinations for domestic and stock access licences

- (1) (Repealed)
- (2) Unless the Minister determines otherwise, 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 with a share component that specifies this water source.
- (3) (Repealed)

40 Available water determinations for local water utility access licences

- (1) (Repealed)
- (2) Unless the Minister determines otherwise, 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 with a share component that specifies this water source.
- (3) (Repealed)

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

- (1) (Repealed)
- (2) Unless the Minister determines otherwise, at the commencement of each water year, an available water determination of 1 ML per unit of share component is to be made for regulated river (high security) access licences in this water source.
- (3) (Repealed)
- (4) Subject to the limits in clause 38 (2) (b), available water determinations for regulated river (high security) access licences in this water source may be made after the sum of available water determinations for domestic and stock and local water utility access licences in that water source in that water year equals 100% of share components and there is sufficient water available after making provision for:
 - (a) the environmental release rules established in clause 26,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,
 - (f) allocations remaining in access licence water allocation accounts,
 - (g) water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) to (f),
 - (h) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from available water determinations for regulated river (high security) access licences, and
 - (i) any other relevant matters.

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

- (1) (Repealed)
- (2) Subject to subclause (3), whenever the sum of available water determinations for regulated river (high security) access licences is equal to 1 ML per unit share, then available water determinations may be made for regulated river (general security) access licences in this water source.

- (3) An available water determination for regulated river (general security) access licences in this water source may be made when there is sufficient water available after taking into account:
- (a) the environmental release rules established in clause 26,
 - (b) requirements for domestic and stock rights,
 - (c) requirements for native title rights,
 - (d) requirements for domestic and stock access licences,
 - (e) requirements for local water utility access licences,
 - (f) requirements for regulated river (high security) access licences,
 - (g) allocations remaining in access licence water allocation accounts,
 - (h) water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) to (g),
 - (i) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from the available water determination for regulated river (general security) access licences, and
 - (j) any other matters considered relevant by the Minister.

Note. Assessments indicate that when Carcoar Dam is full it should be possible for each general security access licence account to hold a maximum 1.36 ML per unit share.

43 Available water determinations for supplementary water access licences

- (1) (Repealed)
- (2) Unless the Minister determines otherwise, an available water determination of 1 ML per unit of share component, or such lower amount that results from Division 1 of this Part, is to be made at the commencement of each water year, for supplementary water access licences in this water source.

Note. Division 1 of this Part provides for available water determinations for supplementary water access licences to be reduced where the long-term average annual extraction limit for this water source has been assessed to have been exceeded, as per clauses 35 and 36.

Part 8 Rules for granting access licences

Notes.

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

44 Specific purpose access licences

- (1) Applications for specific purpose access licences, other than those permitted under the Regulation, may not be made in this water source.
- (2) A specific purpose access licence must not be granted in this water source unless the Minister is satisfied that the share and extraction component of the access licence is the minimum required to meet the circumstances in which the access licence is proposed to be used.
- (3) An access licence of the subcategory “Aboriginal cultural” must not be granted in this water source if the share component of the proposed access licence is more than 10 ML/year.

Part 9 Rules for managing access licences

Division 1 Water allocation account management rules

Note. The Act provides for the keeping of water allocation accounts for access licences. The rules in this Part impose further restrictions on the volume of water that may be taken under an access licence over a specified period of time. These restrictions are in addition to any other limits on access licences for the taking of water. It is an offence under the Act to take water otherwise than in accordance with the water allocation account for an access licence.

45 Individual access licence account management rules for the Belubula Regulated River Water Source

- (1) The rules in this clause apply to the taking of water under an access licence with a share component that specifies the Belubula Regulated Water Source.
- (2) In any water year, the water taken under an access licence in this water source, excluding regulated river (high security) access licences and regulated river (general security) access licences must not exceed a volume equal to:
 - (a) the sum of water allocations accrued to the water allocation account for the access licence from available water determinations in that water year, plus
 - (b) any water allocations assigned from another access licence under section 71T of the Act, in that water year, plus
 - (c) any water allocations re-credited in accordance with section 76 of the Act, in that water year, minus
 - (d) any water allocations assigned to another access licence under section 71T of the Act, in that water year.
- (3) In any water year, the water taken under a regulated river (high security) access licence in this water source must not exceed a volume equal to:
 - (a) 1 ML per unit share of the regulated river (high security) access licence share component, plus
 - (b) any water allocations assigned from another access licence under section 71T of the Act, in that water year, plus
 - (c) any water allocations re-credited in accordance with section 76 of the Act, in that water year, minus
 - (d) any water allocations assigned to another access licence under section 71T of the Act, in that water year.
- (3A) The volume of water that can be taken in a water year under a regulated river (general security) access licence, including water taken from uncontrolled flows under clause 48, is hereafter known as the *take limit*.

- (3B) In any water year after the first water year of this Plan, the take limit for a regulated river (general security) access licence must not exceed the lesser of the following:
- (a) the sum of:
 - (i) 1 ML per unit of share component of the access licence, plus
 - (ii) the volume of any water assigned to the A sub-account of the access licence via dealings under section 71T of the Act, minus the volume of water assigned from the A sub-account of the access licence to another access licence via dealings under section 71T of the Act,
 - (b) the sum of:
 - (i) the amount in ML per unit of share component of the access licence resulting from the reduced take limit determined by the Minister under clause 36, plus
 - (ii) the volume of any water assigned to the A sub-account of the access licence via dealings under section 71T of the Act, minus the volume of water assigned from the A sub-account of the access licence to another access licence via dealings under section 71T of the Act.
- (4) Water allocations remaining in the water allocation account of an access licence in this water source, excluding regulated river (general security) access licences, cannot be carried over from one water year to the next.
- (5) The water allocation accounts of all regulated river (general security) access licences will be comprised of two sub-accounts, referred to as the *A sub-account* and the *B sub-account*.
- (6) Water allocations can be carried over in the water allocation sub-accounts for a regulated river (general security) access licence from one water year to the next.
- (7) At the beginning of each water year, the volume of water allocations in the A sub-account of each access licence will be compared against the take limit for that water year and:
- (a) if the volume of water allocations in the A sub-account is less than the take limit, then water will be moved from the B sub-account to the A sub-account until the volume of water allocations in the A sub-account equals the take limit or there is no longer water available to move, or
 - (b) if the volume of water allocations in the A sub-account is greater than the take limit, then water will be moved from the A sub-account to the B sub-account until the volume of water allocations in the A sub-account equals the take limit.

- (8) Water allocations accrued from available water determinations for regulated river (general security) access licence will be credited to the A sub-account until the sum of:
 - (a) the volume of water allocations in the A sub-account resulting from adjustments under subclause (7), plus
 - (b) the sum of allocations credited to the A sub-account in that water year from available water determinations, plus
 - (c) the volume of water allocations taken from the A sub-account within that water year prior to the available water determination, plus
 - (d) the volume of water taken under clause 48 within that water year prior to the available water determination,equals the take limit for that water year.
- (9) Water allocations from available water determinations for regulated river (general security) access licences that were not credited to the A sub-account under subclause (8) will be credited to the B sub-account subject to subclause (10).
- (10) The sum of the volume of water allocations held in the A sub-account of a regulated river (general security) access licence plus the volume of water allocations held in the B sub-account of the access licence may not, at any time, exceed a volume equivalent to 1.1 ML per unit share.
- (11) Water taken under a regulated river (general security) access licence is to be debited from the A sub-account of the access licence.
- (12) Water must not be taken under a regulated river (general security) access licence if it would cause the volume of water in the A sub-account to be less than zero.
- (13) The volume of water taken in an uncontrolled flow event must only be debited from the water allocation account of a regulated river (high security) access licence in accordance with the rules in clause 47.

Division 2 Daily access rules

46 General priority of extractions for access licences

- (1) This clause does not apply to supplementary water access licences.
- (2) Where the extraction component of an access licence in this water source does not specify a rate of extraction as a share of supply capability or a volume per unit time, the following priority of extraction will apply whenever supply capability is insufficient to satisfy all water requirements in any section of the water source:

- (a) water will be supplied 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, and
 - (b) then any remaining supply capability will be shared between regulated river (general security) access licences that have placed an order for water, in proportion to share components specified on the access licences.
Note. During periods of channel capacity constraint, the implementation of the above provisions may result in short term ordering delays.
- (3) The extraction components of access licences in this water source may be amended under section 68A of the Act to specify a volume per unit of time or share of supply capability in order to share the impacts of any future physical supply constraint amongst access licences.
 - (4) The rate or shares specified in the amended extraction components of domestic and stock access licences, local water utility access licences and regulated river (high security) access licences under subclause (3) should, where possible, be the amount which, in the Minister's opinion, is sufficient to satisfy the maximum daily water requirements.
 - (5) The rate or shares specified in the amended extraction components of the regulated river (general security) access licences under subclause (3) should be in proportion to the share component of each access licence.

47 Taking of uncontrolled flows under regulated river (high security) access licences

Note. This clause allows for the take of uncontrolled flow under section 85A of the Act for regulated river (high security) access licences but not for regulated river (general security) access licences.

- (1) The taking of uncontrolled flows by the holder of a regulated river (high security) access licence that nominates a water supply work that has had metering equipment installed in connection with it, is permitted in accordance with this clause.
Note. Uncontrolled flows are defined in the Dictionary to this Plan.
- (2) The following rules apply to the taking of uncontrolled flows:
 - (a) when the sum of available water determinations in any water year is less than or equal to 0.2 ML per unit share for regulated river (high security) access licences then the taking of water will only be permitted when uncontrolled flows in the Belubula Regulated River are greater than or equal to 13 ML/day at the Helensholme gauge (412033),
 - (b) when the sum of available water determinations in any water year is less than or equal to 0.5 ML and greater than 0.2 ML per unit share for regulated river (high security) access licences then the taking of water will only be permitted when

uncontrolled flows in the Belubula Regulated River are greater than or equal to 20 ML/day at the Helensholme gauge (412033), and

- (c) when the sum of available water determinations in any water year is greater than 0.5 ML per unit share for regulated river (high security) access licences, the taking of water from uncontrolled flows will not be permitted.
- (3) The total amount of water that may be extracted under this clause in any water year by a regulated river (high security) access licence holder must not exceed an amount that is equal to 0.5 ML per unit share of the regulated river (high security) access licence share component.
- (4) If available water determinations are made for regulated river (high security) access licences during that water year after the taking of water from uncontrolled flows is no longer permitted, then the water allocation accounts of regulated river (high security) access licences will be debited by the volume of water taken from uncontrolled flows up to the amount credited to the account from those available water determinations.
- (5) Access licence holders must supply the operator with meter readings taken immediately prior to and after the taking of uncontrolled flow within 7 days of ceasing to take uncontrolled flows.
- (6) If the total amount of uncontrolled flows taken under an access licence exceeds the limits specified in subclause (3), then a volume equivalent to the exceedance will be debited from allocations credited to the access licence water allocation account in that water year.

48 Taking of uncontrolled flows under regulated river (general security) access licences

- (1) The taking of uncontrolled flows by the holder of a regulated river (general security) access licence (other than a licence specified in Schedule 1) that nominates a water supply work that has had metering equipment installed in connection with it, is permitted in accordance with this clause.
- (2) (Repealed)
- (3) For the purpose of this clause, *effective available water* equals $(C + D)/E$, where:
 - (a) *C* equals the volume of water in all regulated river (general security) access licence A sub-accounts resulting from adjustments under clause 45 (7),
 - (b) *D* equals the sum of allocations credited to all regulated river (general security) access licence A sub-accounts in that water year from available water determinations, and

- (c) *E* equals the sum of the share components of all regulated river (general security) access licences in this water source.
- (4) (Repealed)
- (5) The taking of uncontrolled flows by regulated river (general security) access licences is permitted when:
 - (a) the effective available water is less than or equal to 0.2 and flows at the Helensholme gauge (412033) are equal to or greater than 13 ML/day, or
 - (b) the effective available water is less than or equal to 0.5 and greater than 0.2 and flows at the Helensholme gauge (412033) are equal to or greater than 20 ML/day, or
 - (c) the volume of water in Carcoar Dam storage is less than 21,000 ML and flows at the Helensholme gauge (412033) are equal to or greater than 20 ML/day.
- (6) (Repealed)
- (7) (Repealed)
- (8) Access licence holders must supply Water NSW with meter readings taken immediately prior to and after the taking of uncontrolled flow within 7 days of ceasing to take uncontrolled flows.
- (9) (Repealed)

49 Taking of water under supplementary water access licences

- (1) An order under section 70 of the Act must be made in accordance with the provisions of this clause.
- (2) An order under section 70 and subclause (1) may authorise the taking of water under a supplementary water access licence in accordance with the following rules:
 - (a) the taking of water under supplementary water access licences should, as far as possible, be managed to evenly share access opportunity between all supplementary water access licence holders,
 - (b) the maximum volume of water that may be taken under the supplementary water access licences referred to in subclause (1) during each period of time to which an announcement applies may be expressed as a percentage of the supplementary water account limit specified on the water allocation account statement,
 - (c) taking of water under the supplementary water access licences should only be permitted when flows in the Belubula River at the Helensholme gauge (412033) are equal to or greater than 20 ML/day.

Note. Access to supplementary water access licences is from unregulated flows and not from water released from the dam. Access to supplementary water access licences is only permitted in accordance with this clause and when releases are being made as in accordance with clause 31 (2).

DRAFT

Part 10 Access licence dealing rules

Minister's note.

The Department of Industry - Water is considering an option to allow limited conversion of regulated river (high security) entitlements from downstream regulated river water sources to access licences in connected upstream unregulated 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 Lachlan and Belubula 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.

50 General

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

Notes.

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

51 Conversion of access licence to new category

- (1) This clause relates to dealings under section 71O of the Act in this water source.
- (2) Dealings under section 71O of the Act are prohibited in this water source.

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

- (1) This clause relates to dealings under section 71R of the Act in this water source.
- (2) Dealings under section 71R of the Act are prohibited in this water source.

52A Assignment of rights dealings

- (1) This clause relates to dealings under section 71Q of the Act in this water source.
- (2) Dealings under section 71Q of the Act between different water sources are prohibited in this water source.

53 Assignment of water allocations dealings

- (1) Dealings under section 71T of the Act between different water sources are prohibited in this water source.
- (2) Dealings under section 71T of the Act within the same water source are prohibited in this water source if the dealing involves:
 - (a) the assignment of water allocation from the B sub-account of a regulated river (general security) access licence to the A sub-account of another regulated river (general security) access licence,
 - (b) the assignment of water allocation will cause the sum of the water allocations in the A sub-account and B sub-account of a regulated river (general security) access licence to exceed 1.3 ML per unit share,
 - (c) the assignment of water allocation from a supplementary water access licence to an access licence of another category, or
 - (d) the assignment of water allocation to a supplementary water access licence from an access licence of another category.

54 Interstate transfer of access licence and assignment of water allocation

- (1) Dealings under section 71U of the Act involving the interstate transfer of access licences to or from this water source are prohibited.
- (2) Dealings under section 71V of the Act involving the interstate assignment of water allocations to or from access licences in this water source are prohibited.

54A Nomination of water supply works dealings

- (1) Dealings under section 71W of the Act that involve an access licence being amended to nominate a water supply work located in a different water source to that specified in the share component of the access licence are prohibited.
- (2) Dealings under section 71W of the Act that involve the nomination of a water supply work located in a State other than NSW by an access licence in this water source are prohibited.
- (3) Dealings under section 71W of the Act that involve the nomination of a water supply work in this water source by an access licence from a State other than NSW are prohibited.

Part 11 Mandatory conditions

Division 1 General

55 General

In this Part:

- (a) a requirement to notify the Minister in writing is satisfied by making a notification in writing to one of the addresses listed in Schedule 2 to this Plan or to the email address for enquiries on the Department's website.

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

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

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

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

Note. *Logbook* is defined in the Dictionary.

Ministers note.

Regulations have been drafted to impose new mandatory conditions relating to metering and logbooks by regulation. If that occurs, it is proposed to remove all clauses providing for mandatory conditions to be imposed in relation to metering and logbooks from water sharing plans. Consultation on the proposed regulations occurred in September and October 2018.

Division 2 Access licences

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

56 General

- (1) Access licences in this water source must have mandatory conditions to give effect to the following:
- (a) the relevant water allocation account management rules specified in Division 1 of Part 9 of this Plan,

- (b) water must not be taken under an access licence otherwise than in compliance with the conditions applying to the water supply work approval for the water supply work through which water is to be taken,
 - (c) the holder of the access licence must notify the Minister, in writing, immediately upon becoming aware of a breach of any condition of the access licence.
 - (d) (Repealed)
- (2) Access licences in this water source, excluding access licences that nominate only metered water supply works with a data logger, must have mandatory conditions to give effect to the following:
- (a) the holder of the access licence must keep a Logbook,
 - (b) the holder of the access licence must record the following in the Logbook:
 - (i) each date and period of time during which water was taken under the access licence,
 - (ii) the volume of water taken on that date,
 - (iii) the water supply work approval number of the water supply work used to take the water on that date,
 - (iv) the purpose or purposes for which the water was taken on that date, and
 - (v) any other information required to be recorded in the Logbook under the rules of this Plan,
 - (c) the holder of the access licence must produce the Logbook to the Minister for inspection, when requested, and
 - (d) the holder of the access licence must retain the information required to be recorded in the Logbook for five years from the date to which that information relates.
- (3) The Minister may require the holder of an access licence that nominates only a metered water supply work with a data logger to keep a Logbook in accordance with any requirements set out in subclause (2).
- (4) All access licences, except supplementary water access licences, shall have a mandatory condition that only allows the taking of water, other than from uncontrolled flows, if it has been ordered in accordance with procedures established by the Minister.
- (5) All regulated river (high security) access licences must have mandatory conditions to give effect to the rules in clause 47.
- (6) All regulated river (general security) access licences must have mandatory conditions to give effect to the rules in clauses 45 and 48.

- (7) All supplementary water access licences must have mandatory conditions to give effect to the rules in clause 49.
- (8) All access licences of the subcategory “Aboriginal cultural” must have a mandatory condition that specifies that water must only be taken under the access licence by Aboriginal persons or Aboriginal communities for personal, domestic or communal purposes, including drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, gathering and for recreational, cultural and ceremonial purposes.

Division 3 Water supply work approvals

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

57 General

- (1) Water supply work approvals for water supply works in this water source must have mandatory conditions to give effect to the following:
 - (a) the water supply work must not be used to take water under an access licence unless in compliance with the relevant access rules for the taking of water as specified in Division 2 of Part 9 of this Plan,
 - (b) when directed by the Minister by notice in writing, the approval holder must have metering equipment installed that meets the following requirements:
 - (i) the metering equipment must accurately measure and record the flow of all water taken through the water supply work,
 - (ii) the metering equipment must comply with Australian Technical Specification ATS 4747, *Meters for non-urban water supply*, as may be updated or replaced from time to time,
 - (iii) the metering equipment must be operated and maintained in a proper and efficient manner at all times,
 - (iv) the metering equipment must be sited and installed at a place in the pipe, channel or conduit between the water source and the first discharge outlet. There must be no flow of water into or out of the pipe, channel or conduit between the water source and the metering equipment, and
 - (v) any other requirements as to type, standard or other criteria for the metering equipment specified by the Minister by notice in writing,
- Note.** The Minister may also direct a landholder or person to install, replace or to properly maintain metering equipment under section 326 of the Act.
- (c) the approval holder must ensure that if the water supply work is abandoned or replaced that it is decommissioned in accordance with any direction from the

- Minister. The Minister may direct that any such water supply work need not be decommissioned,
- (d) within two months of the decommissioning of the water supply work, the approval holder must notify the Minister in writing that the water supply work has been decommissioned, and
 - (e) the holder of the water supply work approval must notify the Minister in writing immediately upon becoming aware of a breach of any condition of the approval, and
 - (f) any other conditions required to implement the provisions of this Plan.
- (2) Water supply work approvals for water supply works in this water source, excluding a water supply work that is a metered water supply work with a data logger, must have mandatory conditions to give effect to the following:
- (a) the holder of a water supply work approval must keep a Logbook,
 - (b) the holder of a water supply work approval must record the following in the Logbook:
 - (i) each date and period of time during which water was taken using the water supply work,
 - (ii) the volume of water taken on that date,
 - (iii) the number of the access licence under which water was taken on that date, or, if water was taken under some other authority (such as basic landholder rights), the authority under which water was taken,
 - (iv) the purpose or purposes for which the water was taken on that date,
 - (v) details of any cropping carried out using the water taken through the water supply work including the type of crop, area cropped and dates of planting and harvesting,
 - (vi) where metering equipment has been installed for use in connection with the water supply work, the meter reading before water is taken,
 - (vii) where metering equipment has not been installed for use in connection with the water supply work, details of all pumping activities for the water supply work including pump running hours, pump power usage or pump fuel usage, pump start and stop times and pump capacity per unit of time, and
 - (viii) any other information required to be recorded in the Logbook under the rules of this Plan,

- (c) the holder of a water supply work approval must produce the Logbook to the Minister for inspection when requested, and
 - (d) the holder of a water supply work approval must retain the information required to be recorded in the Logbook for five years from the date to which that information relates.
- (3) The Minister may require the holder of a water supply work approval for a metered water supply work with a data logger to keep a Logbook in accordance with any requirements under subclause (2).
- (4) Subclauses (1)–(3) do not apply to water supply work approvals held by Water NSW.
- (5) Water supply work approvals held by Water NSW must have mandatory conditions where required to give effect to the System Operation Rules in Part 6 of this Plan and clauses 39 (3), 40 (3) and 41 (3).

Part 12 Amendment of this Plan

58 General

- (1) Amendments specified throughout this Plan and in this Part are amendments authorised by this Plan.
- (2) An amendment authorised by this Plan is taken to include any consequential amendments required to be made to this Plan to give effect to that particular amendment.
- (3) An amendment authorised by this Plan which results in a variation of the bulk access regime is an amendment authorised by this Plan for the purposes of sections 87 (2) (c) and 87AA of the Act.

59 Part 1

Part 1 may be amended to do any of the following:

- (a) add a river or section of river to this water source or remove a river or section of river from this water source.
- (b) (Repealed)

59A Part 6

Part 6 may be amended to implement modified environmental release rules taking account of the results of a dedicated project that will model the effects and impacts of various combinations of end of system flow rules, uncontrolled flow access rules and daily access rules.

60 Part 8

Part 8 may be amended to include additional categories of specific purpose access licence.

61 Part 9

Part 9 may be amended to provide alternate rules for accessing uncontrolled flows taking account of the results of a dedicated project that will model the effects and impacts of various combinations of end of system flow rules, uncontrolled flow access rules and daily access rules.

62 Part 10

Part 10 may be amended to:

- (a) allow dealings under section 71R of the Act from regulated river (general security) access licences with share components that nominate the Lachlan Regulated River Water Source as defined in the *Water Sharing Plan for the Lachlan Regulated*

River Water Source 2003 to regulated river (general security) access licences with share components that nominate the Belubula Regulated River Water Source, provided the *Water Sharing Plan for the Lachlan Regulated River Water Source 2003* has been amended to permit dealings under 71R from the Belubula Regulated River Water Source, subject to total share components of all access licences in the Belubula Regulated River Water Source not exceeding 27,219 ML, and

- (b) provide for the conversion of regulated river (high security) licences with share components that specify this water source to access licences with share components that specify connected upstream unregulated water sources.

63 Part 11

Part 11 of this Plan may be amended to change the rules in relation to record keeping including amendments in relation to requirements for Logbooks.

64 Dictionary

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

65 Schedule 1

Schedule 1 may be amended to add or remove an access licence.

66 Other

- (1) This Plan may be amended to provide rules for the following:
 - (a) the management of floodplain harvesting within this water source,
 - (b) the shepherding of water,
Note. *Shepherding* is defined in the Dictionary.
 - (c) any new category of access licence established for the purpose of urban stormwater harvesting, or
 - (d) the interception of water before it reaches a stream or aquifer by plantations or other means.
- (2) Consequential amendments may be made to this Plan as a result of an amendment to the Act or regulations.
- (3) This Plan may be amended following the granting of a native title claim pursuant to the provisions of the *Native Title Act 1993* (Cth) to give effect to an entitlement granted under that claim.
- (4) This Plan may be amended to enable a water resource plan to be accredited under the *Water Act 2007* (Cth).

- (5) This Plan may be amended after year five of this Plan to provide rules for the protection of water dependent Aboriginal cultural assets to do any of the following:
 - (a) identify water dependent Aboriginal cultural assets in a Schedule to this Plan,
 - (b) amend the access rules to protect water dependent Aboriginal cultural assets,
 - (c) restrict the granting and amending of water supply work approvals to protect water dependent Aboriginal cultural assets, or
 - (d) amend the dealing rules to protect water dependent Aboriginal cultural assets.
- (6) Any amendment under subclause (5) will take into account the socio-economic impacts of the proposed change and the environmental water requirements of the water source.
- (7) Before making an amendment pursuant to subclause (5) the Minister should consult with relevant Government agencies and stakeholders.

Dictionary

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

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

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

flow regimes are the collected magnitudes, durations, frequency and patterns of natural flows that characterise a given river or water source.

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.

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

NSW Environmental Water Manager means the NSW Government department with the conservation role for water-dependent assets. This responsibility extends to managing the NSW environmental water portfolio.

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

operator means the operator of the water supply system.

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

shepherding means the delivery of a calculated volume of water that was created by the non-activation/reduced extraction at a nominated licence location to a more downstream location, after consideration of losses, where it will be made available for extraction or use for the environment.

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

uncontrolled flows are flows within this water source that are either not required for or not able to be used to meet the environmental release rules specified in clause 26, the supply for domestic and stock and native title rights rules specified in clause 31 or access licence water orders.

Water Act 1912 entitlement has the same meaning as an entitlement has in clause 2 of Schedule 10 to the Act.

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

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

water year means a year commencing 1 July.

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

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Schedule 1 Access licences prohibited from taking uncontrolled flows

1 General

This clause applies to each access licence which replaces a *Water Act 1912* entitlement listed in the table below.

<i>Water Act 1912</i> access licences that are prohibited from taking uncontrolled flows
70SL051344
70SL046463
70SL090584
70SL024759
70SL038219
70SL025579
70SL045151
70SL031405

Schedule 2 Offices

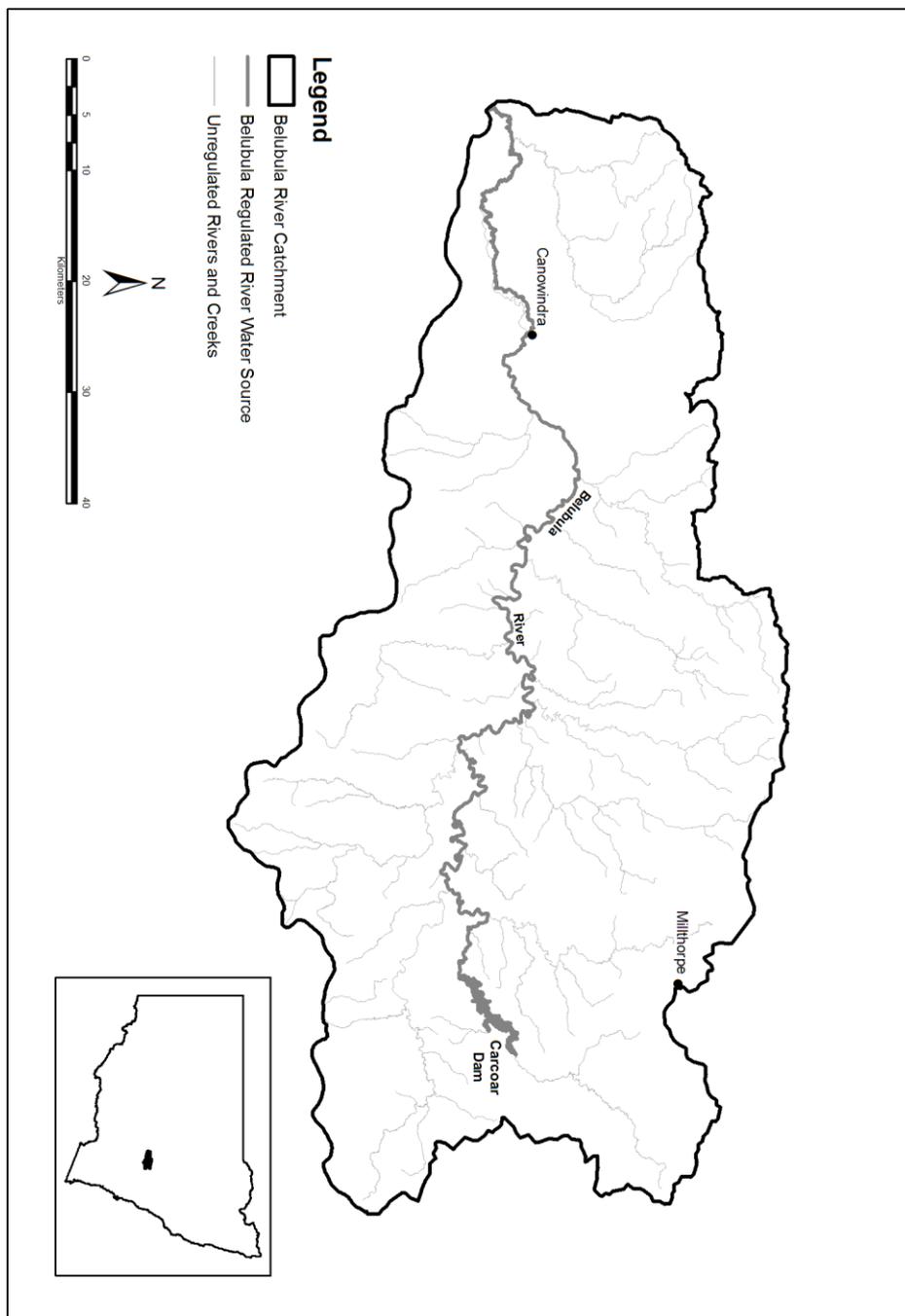
Any notifications that may be required to be made to the Minister, as specified in this Plan can be made to the following offices:

Department of Industry, Water
10 Valentine Ave
PO Box 3720
PARRAMATTA NSW 2150

Department of Industry, Water
9 Spring St
PO Box 291
FORBES NSW 2871

Department of Industry, Water
Level 2
181–187 Anson St
PO Box 53
ORANGE NSW 2800

Appendix 1 Overview of the Belubula Regulated River Water Source



Appendix 2 (Repealed)

Appendix 3 (Repealed)

DRAFT

Appendix 4 Targeted objectives, strategies and performance indicators

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
Environmental					
<p>Clause 9 (2) (a) (i)</p> <p>Protect and, where possible, enhance the recorded distribution or extent of target ecological populations including native fish and native vegetation over the term of this Plan</p>	<p>Clause 9 (3) (a) – (d)</p>	<p>Clause 9 (5) (a) and (e)</p>	<p>Priorities for targeted monitoring within this water source are locations that include the following conditions:</p> <ol style="list-style-type: none"> 1. One or more recorded or predicted occurrences of: <ol style="list-style-type: none"> a. Murray cod b. Eel-tailed catfish c. Purple-spotted gudgeon d. Olive perchlet e. Silver perch f. Golden perch g. High fish diversity locations h. River red gum woodland i. Black box-coolibah woodland j. Lowland Catchment of the Lachlan River Endangered Ecological Community 2. River sections that were identified as medium or high risk in the Risk Assessment for the <i>Lachlan Water Resource Plan area (SW10)</i> 	<p><i>Risk assessment for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink -</p> <p><i>Guidelines for setting and evaluating plan objectives for water management</i></p> <p>Add Hyperlink -</p> <p><i>Lachlan Surface Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p> <p><i>Lachlan Long-Term Water Plan</i></p> <p>Add Hyperlink -</p>	<p>Similar objectives and monitoring targets can be found in other water sharing plan areas</p> <p>Therefore, relevant monitoring data from those water sharing plan areas will be considered when evaluating this objective for this water source.</p>
<p>Clause 9 (2) (a) (ii)</p> <p>Protect and, where possible, enhance the population structure of target ecological</p>	<p>Clause 9 (3) (a) – (d)</p>	<p>Clause 9 (5) (b) and (e)</p>	<p>Priorities for targeted monitoring within this water source are locations that include the following conditions:</p> <ol style="list-style-type: none"> 1. One or more recorded or 	<p><i>Risk assessment for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink -</p>	<p>Similar objectives and monitoring targets can be found in other water sharing plan areas</p>

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
populations including native fish and native vegetation communities			<p>predicted occurrences of:</p> <ol style="list-style-type: none"> a. Murray cod b. Eel-tailed catfish c. Purple-spotted gudgeon d. Olive perchlet e. Silver perch f. Golden perch g. High fish diversity locations h. River red gum woodland i. Black box-coolibah woodland j. Lowland Catchment of the Lachlan River Endangered Ecological Community <p>2. River sections that were identified as medium or high risk in the Risk Assessment for the <i>Lachlan Water Resource Plan area (SW10)</i></p>	<p><i>Guidelines for setting and evaluating plan objectives for water management</i></p> <p>Add Hyperlink -</p> <p><i>Lachlan Surface Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	<p>Therefore, relevant monitoring data from those water sharing plan areas will be considered when evaluating this objective for this water source.</p>
<p>Clause 9 (2) (a) (iii)</p> <p>Protect and, where possible, enhance the connectivity between and within water sources, including to support surface and groundwater exchange and downstream processes including priority carbon and nutrient pathways and</p>	<p>Clause 9 (3) (a) – (d)</p>	<p>Clause 9 (5) (a), (c) and (e)</p>	<p>Priorities for targeted monitoring within this water source include the following conditions:</p> <ol style="list-style-type: none"> 1. One or more river sections that include: <ol style="list-style-type: none"> a. Tributary catchments that can contribute unregulated carbon and nutrient loads into the regulated river b. Low lying floodplains or 	<p><i>Risk assessment for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink -</p> <p><i>Guidelines for setting and evaluating plan objectives for water management</i></p> <p>Add Hyperlink -</p> <p><i>Lachlan Surface Water Monitoring,</i></p>	<p>Similar objectives and monitoring targets can be found in other water sharing plan areas</p> <p>Therefore, relevant monitoring data from those water sharing plan areas will be considered when evaluating this objective for</p>

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
priority fish passages			<p>benches that can be rich sources of carbon and nutrients</p> <ul style="list-style-type: none"> c. Catchments that have extensive riparian vegetation d. Significant barriers to migratory fish movement e. Location where hydrologic and hydraulic connectivity may be at risk <p>2. River sections that were identified as medium or high risk in the <i>Risk Assessment for the Lachlan Water Resource Plan area (SW10)</i></p>	<p><i>Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	this water source.
<p>Clause 9 (2) (a) (iv)</p> <p>Protect and, where possible, enhance water quality within this water source to support water dependent ecosystems and ecosystem functions</p>	Clause 9 (3) (a) - (d)	Clause 9 (5) (d) and (e)	<p>Priorities for targeted monitoring within this water source are locations that include the following conditions:</p> <ul style="list-style-type: none"> 1. Representative river sections identified in the <i>NSW State Water Quality Assessment and Monitoring Program</i> 2. River sections that were identified as medium or high risk in the <i>Risk Assessment for the Lachlan Water Resource Plan area (SW10)</i> 	<p><i>Risk assessment for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink -</p> <p><i>Water quality management plan for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink –</p> <p><i>NSW Cold Water Pollution Strategy</i></p> <p>Add Hyperlink –</p> <p><i>NSW Draft algal risk management sub plan</i></p> <p>Add Hyperlink –</p> <p><i>Guidelines for setting and evaluating Plan objectives for water</i></p>	<p>Similar objectives and monitoring targets can be found in other water sharing plan areas and programs.</p> <p>Therefore, relevant monitoring data from those water sharing plan areas and programs may be considered when evaluating this objective for this water source.</p>

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
				<p><i>management</i></p> <p>Add Hyperlink -</p> <p><i>Lachlan Surface Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	
Economic					
<p>Clause 10 (2) (a)</p> <p>Provide water trading opportunities for agriculture, business and landholders</p>	<p>Clause 10 (3) (a), (b), (c) and (d)</p>	<p>Clause 10 (5) (a) and (b)</p>	<p>Priority locations for targeted monitoring within this water source are locations that include one or more of the following conditions:</p> <ol style="list-style-type: none"> 1. High community dependency on surface water extraction (for agriculture, business, landholders) as evidenced by: <ol style="list-style-type: none"> a. the number of Water Access Licence (WAL): by WAL category b. water made available (ML) each year over the past 5 years by WAL licence category c. Water usage (ML) each year over the last five years by WAL category d. Gross value of irrigated production each year over the last five years e. Gross value of dryland agriculture production each year over the last five years 	<p><i>Guidelines for setting and evaluating Plan objectives for water management</i></p> <p>Add Hyperlink -</p> <p><i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	<p>Similar objectives and monitoring targets are found in other water sharing plan areas.</p> <p>The performance indicators and selection criteria have been chosen to work particularly well in situations where people or the economy are highly dependent on water extraction</p>

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
			<ul style="list-style-type: none"> f. The number, total value and VWAP of allocation trades in- and out- of the region each year over the last five years g. The number, total value and VWAP of entitlement trades in- and out- of the region each year over the last five years h. Town population <p>2. Economic diversity (measured using the Shannon-Weaver Index¹).</p>		
<p>Clause 10 (2) (b)</p> <p>Maintain or enhance access to water for agriculture, business and landholders</p>	<p>Clause 10 (3) (a), (b), (c) and (d)</p>	<p>Clause 10 (5) (a), (b) and (c)</p>	<p>Priority locations for targeted monitoring within this water source are locations that include one or more of the following conditions:</p> <ul style="list-style-type: none"> 1. High community dependency on surface water extraction (for agriculture, business, landholders) as evidenced by: <ul style="list-style-type: none"> a. the number of Water Access Licence (WAL): by WAL category b. water made available (ML) each year over the past 5 years by WAL licence category c. Water usage (ML) each year over the last five years by WAL category 	<p><i>Guidelines for setting and evaluating Plan objectives for water management</i></p> <p>Add Hyperlink - <i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	<p>Similar objectives and monitoring targets are found in other water sharing plan areas</p> <p>The performance indicators and selection criteria have been chosen to work particularly well in situations where people or the economy are highly dependent on water extraction</p>

¹ <https://implanhelp.zendesk.com/hc/en-us/articles/115009505687-The-Shannon-Weaver-Index-of-Economic-Diversity-An-Overview-and-Descriptive-Analysis>
http://www.jrap-journal.org/pastvolumes/2010/v47/jrap_v47_n2_a4_thorvaldson_squibb.pdf

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
			<ul style="list-style-type: none"> d. Gross value of irrigated production each year over the last five years e. Gross value of dryland agriculture production each year over the last five years f. The number, total value and VWAP of allocation trades in- and out- of the region each year over the last five years g. The number, total value and VWAP of entitlement trades in- and out- of the region each year over the last five years h. Town population <p>2. Economic diversity (measured using the Shannon-Weaver Index²).</p>		
<p>Clause 10 (2) (c)</p> <p>Maintain or enhance water quality for agriculture, business and landholders</p>	<p>Clause 10 (3) (e)</p>	<p>Clause 10 (5) (c)</p>	<p>Priorities for targeted monitoring within this water source are locations that include the following conditions:</p> <ul style="list-style-type: none"> 1. Representative river sections identified in the <i>NSW State Water Quality Assessment and Monitoring Program</i> 2. River sections that were identified as medium or high risk in the <i>Risk Assessment for the Lachlan water resource plan area</i> 	<p><i>Risk assessment for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink -</p> <p><i>Water quality management plan for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink –</p> <p><i>NSW Draft algal risk management</i></p>	<p>Similar objectives and monitoring targets can be found in other water sharing plan areas and programs. Therefore, relevant monitoring data from those water sharing plan areas and programs may be considered when evaluating this objective for this water source.</p>

² <https://implanhelp.zendesk.com/hc/en-us/articles/115009505687-The-Shannon-Weaver-Index-of-Economic-Diversity-An-Overview-and-Descriptive-Analysis>
http://www.jrap-journal.org/pastvolumes/2010/v47/jrap_v47_n2_a4_thorvaldson_squibb.pdf

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
			(SW10)	sub plan Add Hyperlink – <i>Guidelines for setting and evaluating Plan objectives for water management</i> Add Hyperlink - <i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i> Add Hyperlink -	
Aboriginal cultural					
Clause 11 (2) (a) Provide access to water for holders of native title	Clause 11 (3) (a) and (b)	Clause 11 (5) (a) to (f)	Priorities for targeted monitoring within this water source include the following: <ol style="list-style-type: none"> 1. the number of Water Access Licence (WAL) by WAL category³ 2. water made available (ML) each year over the past 5 years by WAL licence category⁴ 3. Water usage (ML) each year over the last five years by WAL category⁵ 	<i>Guidelines for setting and evaluating Plan objectives for water management</i> Add Hyperlink - <i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i> Add Hyperlink -	

³ Aboriginal Cultural Water Access Licence/Aboriginal Community Development Water Access Licences

⁴ WAL categories as above

⁵ WAL categories as above

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
			4. Indigenous population 5. Population / groups holding native title with respect to water, as determined under the <i>Native Title Act 1993 (Cwlth)</i> ⁶		
Clause 11 (2) (b) Provide access to water for Indigenous cultural use, including recreational fishing	Clause 11 (3) (b)-(d)	Clause 11 (5) (a) to (c), (e), (f) and (h)	Priorities for targeted monitoring within this water source include the following: 1. the number of Water Access Licence (WAL): by WAL category ⁷ 2. water made available (ML) each year over the past 5 years by WAL licence category ⁸ 3. Water usage (ML) each year over the last five years by WAL category ⁹ 4. Indigenous population 5. Population / groups holding native title with respect to water, as determined under the <i>Native Title Act 1993 (Cwlth)</i> ¹⁰	<i>Guidelines for setting and evaluating Plan objectives for water management</i> Add Hyperlink - <i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i> Add Hyperlink -	

⁶ The *Water Management Act 2000* recognises the cultural and spiritual importance of water to Aboriginal people in NSW. Anyone who holds native title with respect to water, as determined under the *Native Title Act 1993 (Cwlth)*, can take and use water for a range of needs. These include personal, domestic and non-commercial communal purposes such as manufacturing traditional artefacts, hunting, fishing, recreation, cultural and ceremonial purposes.

⁷ Aboriginal Cultural Water Access Licence/Aboriginal Community Development Water Access Licences

⁸ WAL categories as above

⁹ WAL categories as above

¹⁰ The *Water Management Act 2000* recognises the cultural and spiritual importance of water to Aboriginal people in NSW. Anyone who holds native title with respect to water, as determined under the *Native Title Act 1993 (Cwlth)*, can take and use water for a range of needs. These include personal, domestic and non-commercial communal purposes such as manufacturing traditional artefacts, hunting, fishing, recreation, cultural and ceremonial purposes.

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
			6. Culturally important fishing locations and species		
Clause 11 (2) (c) Protect identified water-dependent culturally significant areas, including important riparian vegetation communities.	Clause 11 (3) (c), (d)	Clause 11 (5) (a) – (e) and (h)	<p>Priorities for targeted monitoring within this water source include the following:</p> <ol style="list-style-type: none"> 1. the number of Water Access Licence (WAL): by WAL category¹¹ 2. water made available (ML) each year over the past 5 years by WAL licence category¹² 3. Water usage (ML) each year over the last five years by WAL category¹³ 4. Indigenous population 5. Population / groups holding native title with respect to water, as determined under the <i>Native Title Act 1993</i> (Cwlth)¹⁴ 6. Identified cultural assets including vegetation communities and regions 	<p><i>Guidelines for setting and evaluating Plan objectives for water management</i></p> <p>Add Hyperlink - <i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	
Clause 11 (2) (d) Maintain or enhance water	Clause 11 (3) (c) to (e)	Clause 11 (5) (a) to (h)	Priorities for targeted monitoring within this water source include the	<i>Water quality management plan for the Lachlan water resource plan area</i>	

¹¹ Aboriginal Cultural Water Access Licence/Aboriginal Community Development Water Access Licences

¹² WAL categories as above

¹³ WAL categories as above

¹⁴ The *Water Management Act 2000* recognises the cultural and spiritual importance of water to Aboriginal people in NSW. Anyone who holds native title with respect to water, as determined under the *Native Title Act 1993* (Cwlth), can take and use water for a range of needs. These include personal, domestic and non-commercial communal purposes such as manufacturing traditional artefacts, hunting, fishing, recreation, cultural and ceremonial purposes.

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
quality to ensure suitability of water for Indigenous cultural use			following: 1. the number of Water Access Licence (WAL): by WAL category ¹⁵ 2. water made available (ML) each year over the past 5 years by WAL licence category ¹⁶ 3. Water usage (ML) each year over the last five years by WAL category ¹⁷ 4. Indigenous population 5. Population / groups holding native title with respect to water, as determined under the <i>Native Title Act 1993 (Cwlth)</i> ¹⁸ 6. Identified cultural assets	(SW10) Add Hyperlink – <i>Guidelines for setting and evaluating Plan objectives for water management</i> Add Hyperlink - <i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i> Add Hyperlink -	
Social and cultural					
Clause 11A (2) (a) Maintain or improve access to water for basic human needs, town water supply and domestic and stock purposes	Clause 11A (3) (a) and (d)	Clause 11A (5) (a) and (d)	Priorities for targeted monitoring within this water source include the following: 1. High community dependency on water extraction (for basic human needs, town water supply and domestic and stock	<i>Water quality management plan for the Lachlan water resource plan area (SW10)</i> Add Hyperlink – <i>Guidelines for setting and evaluating Plan objectives for water</i>	

¹⁵ Aboriginal Cultural Water Access Licence/Aboriginal Community Development Water Access Licences

¹⁶ WAL categories as above

¹⁷ WAL categories as above

¹⁸ The *Water Management Act 2000* recognises the cultural and spiritual importance of water to Aboriginal people in NSW. Anyone who holds native title with respect to water, as determined under the *Native Title Act 1993 (Cwlth)*, can take and use water for a range of needs. These include personal, domestic and non-commercial communal purposes such as manufacturing traditional artefacts, hunting, fishing, recreation, cultural and ceremonial purposes.

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
			<p>purposes) evidenced by:</p> <ol style="list-style-type: none"> a. the number of Water Access Licence (WAL): by WAL category¹⁹ b. water made available (ML) each year over the past 5 years by WAL licence category²⁰ c. Water usage (ML) each year over the last five years by WAL category²¹ d. Town population <ol style="list-style-type: none"> 2. Turbidity (NTU), colour (HU) and E.coli and chemicals less than Australian Drinking Water Guidelines and utility service level limit at offtake. 	<p><i>management</i></p> <p>Add Hyperlink -</p> <p><i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	
<p>Clause 11A (2) (b)</p> <p>Maintain or improve access to water for water dependent cultural, heritage and recreational uses, including recreational fishing</p>	<p>Clause 11A (3) (b), (c) and (d)</p>	<p>Clause 11A (5) (a), (b), (c) and (d)</p>	<p>Priorities for targeted monitoring within this water source include the following:</p> <ol style="list-style-type: none"> 1. One or more recorded or predicted occurrences of: <ol style="list-style-type: none"> a. Murray cod b. Eel-tailed catfish c. Purple-spotted gudgeon d. Olive perchlet e. Silver perch 	<p><i>Water quality management plan for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink –</p> <p><i>Guidelines for setting and evaluating Plan objectives for water management</i></p> <p>Add Hyperlink -</p>	<p>Similar objectives and monitoring targets can be found in other water sharing plan areas and programs. Therefore, relevant monitoring data from those water sharing plan areas and programs may be considered when evaluating this objective for this water</p>

¹⁹ High (Town water supply)/Domestic And Stock/Domestic And Stock (Domestic)/Unregulated River (Town water supply)/Local Water Utility/Major Utility/Aquifer (Town Water Supply)

²⁰ WAL categories as above

²¹ WAL categories as above

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
			<ul style="list-style-type: none"> f. Golden perch g. High fish diversity locations 2. Recorded takes of native recreational fish within legal age and size classes as described in Appendix 2 3. River sections that were identified as medium or high risk in the Risk Assessment for the Lachlan water resource plan area (SW10) 4. Number of recreational water sites with Red blue-green algae in past 3 years 5. Recreational water sites with Amber blue-green algae in past 3 years 	<p><i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	<p>source.</p>
<p>Clause 11A (2) (c)</p> <p>Maintain or improve water quality for basic human needs, town water supply, domestic and stock purposes and water dependent cultural, heritage and recreational uses, including recreational fishing</p>	<p>Clause 11A (3) (b), (c) and (d)</p>	<p>Clause 11A (5) (a), (d) and (e)</p>	<p>Priorities for targeted monitoring within this water source are locations that include the following conditions:</p> <ul style="list-style-type: none"> 1. Representative river sections identified in the <i>NSW State Water Quality Assessment and Monitoring Program</i> 2. River sections that were identified as medium or high risk in the <i>Risk Assessment for the Lachlan water resource plan area (SW10)</i> 	<p><i>Risk assessment for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink -</p> <p><i>Water quality management plan for the Lachlan water resource plan area (SW10)</i></p> <p>Add Hyperlink -</p> <p><i>NSW Cold Water Pollution Strategy</i></p> <p>Add Hyperlink -</p> <p><i>NSW Draft algal risk management sub plan</i></p>	<p>Similar objectives and monitoring targets can be found in other water sharing plan areas and programs. Therefore, relevant monitoring data from those water sharing plan areas and programs may be considered when evaluating this objective for this water source.</p>

Column 1 Targeted objective	Column 2 Strategies	Column 3 Performance indicators	Column 4 Criteria for selecting priority monitoring locations*	Column 5 Supporting documents	Column 6 Comments
				Add Hyperlink – <i>Guidelines for setting and evaluating Plan objectives for water management</i> Add Hyperlink - <i>Lachlan Planned Environmental Water Monitoring, Evaluation and Reporting Plan</i> Add Hyperlink -	

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