

# Water Sharing Plan for the Castlereagh Unregulated River Water Sources 2011 (Proposed amendments 2019)

## Notes.

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

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## Part 1 Introduction

### 1 Name of this Plan

This Plan is the Water Sharing Plan for the Castlereagh Unregulated River Water Sources 2011 (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 1 October 2011.

**Notes.**

- 1 In accordance with section 43 of the Act, this Plan will have effect for 10 years from 1 July 2012.
- 2 The Minister may extend this Plan for a further period of 10 years after it is due to expire, in accordance with section 43A of the Act.
- 3 Under the Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin and the associated National Partnership Agreement, NSW has agreed to develop water resource plans for Murray-Darling Basin water resources that are consistent with the requirements of the Basin Plan. This plan was amended in 2019, partly to meet NSW's commitments under these arrangements. The water resource plan for the Macquarie-Castlereagh 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 sources known as the Castlereagh Unregulated River Water Sources (hereafter *these water sources*) within the Central West Water Management Area:
  - (a) Binnaway to Gilgandra Water Source,
  - (b) Castlereagh River below Coonamble Water Source,
  - (c) Castlereagh River Gilgandra to Coonamble Water Source,
  - (d) Nedgera Creek Water Source,
  - (e) Teridgerie Creek Water Source,
  - (f) Tooraweenah to Coonamble Tributaries Water Source, and
  - (g) Castlereagh River above Binnaway Water Source.

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

- (2) These water sources are shown on the Plan Map called *Plan Map (WSP012\_Version 3), Water Sharing Plan for the Castlereagh Unregulated River Water Sources 2011* (hereafter ***the Plan Map***) held by the Department.

**Note.** The Plan Map is part of this Plan. An overview of the Plan Map is shown in Appendix 1. Copies of the Plan Map may be inspected at the offices listed in Appendix 2 and are available on the NSW legislation website.

- (3) These water sources consist of all water:
- (a) occurring naturally on the surface of the ground within the boundaries of these water sources, as shown on the Plan Map, and
  - (b) in rivers, lakes and wetlands within the boundaries of these water sources, as shown on the Plan Map.
  - (c) contained within all alluvial sediments on or below the surface of the ground within the bed and the top of the high banks of rivers within the boundaries of the Castlereagh River Unregulated Water Sources, excluding the Castlereagh River above Binnaway Water Source, as shown on the Plan Map.

(3A) (Repealed)

(4) (Repealed)

(5) (Repealed)

(6) This Plan, as amended by *Water Sharing Plan for the Castlereagh (below Binnaway) Unregulated and Alluvial Water Sources Amendment Order 2016* replaces the *Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003*.

(7) This plan, as amended by the *Water Sharing Plan for the Castlereagh River Unregulated and Alluvial Water Sources Amendment Order 2019*, does not apply to the Castlereagh Alluvial Groundwater Source.

**Note.** The *Water Sharing Plan for the Macquarie-Castlereagh Alluvial Groundwater Sources 2019* now applies to the Castlereagh Alluvial Groundwater Source.

## 5 Management zones

(1) For the purposes of this Plan, the following water sources are divided into the following management zones:

(a) Binnaway to Gilgandra Water Source:

(i) Castlereagh River Binnaway to Gilgandra Management Zone, and

**Note.** The Castlereagh River Binnaway to Gilgandra Management Zone is the area of the Binnaway to Gilgandra Water Source including only the Castlereagh River from Binnaway to Gilgandra.

- (ii) Binnaway to Gilgandra Tributaries Management Zone,

**Note.** The Binnaway to Gilgandra Tributaries Management Zone is the area of the Binnaway to Gilgandra Water Source excluding the Castlereagh River from Binnaway to Gilgandra.

- (b) Castlereagh River above Binnaway Water Source:

- (i) Castlereagh River-Timor Dam to Pound Yard Weir Management Zone,
- (ii) Castlereagh River-Pound Yard Weir to Merryula Road Crossing Management Zone,
- (iii) Castlereagh River-Merryula Road Crossing to Belar Creek Confluence Management Zone,
- (iv) Castlereagh River-Belar Creek Confluence to New Mollyann Road Management Zone,
- (v) Belar Creek Management Zone, and
- (vi) Independent Tributaries Management Zone.

**Notes.**

- 1 The Independent Tributaries Management Zone includes all rivers in this water source apart from the main trunk of the Castlereagh River and Belar Creek.
- 2 **Management zone** is defined in the Dictionary.

- (2) The management zones in subclause (1) are shown on the Plan Map.

## 6 (Repealed)

## 7 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.

**Note.** The rules in this Plan include environmental water rules, access licence dealing rules, rules for granting and managing access licences, rules for water supply work approvals, rules for the making of available water determinations, water allocation account rules and daily access rules.

## 8 Interpretation

- (1) Words and expressions that are defined in the Dictionary in Schedule 1 to this Plan have the meaning set out in that Schedule.
- (2) Unless otherwise defined in this Plan, words and expressions that are defined in the Act or in the regulations to 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) Schedules to this Plan form part of this Plan.

- (4A) The Plan Map forms part of this Plan.
- (4B) 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.

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

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

### 9 Vision statement

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

- (a) the health and enhancement of these water sources and their 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.

### 9A Acknowledgement

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

### 10 Environmental objectives

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

**Note.** The ecological condition of these water sources includes high ecological value aquatic ecosystems, target species, communities, populations and key ecosystem functions as defined in Appendix 4.

- (2) The targeted environmental objectives of this Plan is to protect and, where possible, enhance the following over the term of this Plan:

- (a) the recorded distribution or extent of target ecological populations including native fish and native vegetation,

**Note.** Target native fish and native vegetation populations for these water sources are defined in Appendix 4.

- (b) the population structure of target ecological populations including native fish, native vegetation and low flow macroinvertebrate communities,

**Notes.**

1 Target ecological populations include populations of native fish, native vegetation and low flow macroinvertebrate communities. Target ecological assets for these water sources are defined in Appendix 4.

2 **Low flow macroinvertebrate communities** is defined in the Dictionary.

- (c) the connectivity between water sources to support 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 are defined in Appendix 4.
- 3 Downstream processes in these water sources may include maintaining connectivity with downstream water sources.

- (d) water quality to support water-dependent ecosystems and ecosystem functions.

**Notes.**

- 1 Water quality target values for these water sources are defined in the *Water quality management plan for the Macquarie-Castlereagh water resource plan area*.
- 2 Criteria for identifying priority monitoring locations for water quality measurables is defined in Appendix 4.

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

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

**Note.** Part 3 of this Plan reserves all water remaining above the long-term average annual extraction limit for the environment. This strategy will contribute to all objectives in subclause (2).

- (b) reserve a portion of natural flows to mitigate alterations to natural flow regimes,

**Notes.**

- 1 **Flow regimes** is defined in the Dictionary.
- 2 The rules in clauses 46, 46A and 46B of this Plan ensure that very low flows are protected from extraction, and establish flow classes that manage the take of water for the Castlereagh River above Binnaway Water Source. These rules contribute to all objectives in subclause (2).

- (c) restrict the take of water from in-river and off-river pools when the volume of that water is less than full capacity,

**Note.** The rules in clauses 46 (3) and 46B (4) and (5) of this Plan restrict the take of water from in-river and off-river pools when the volume is less than full capacity. These rules contribute to all objectives in subclause (2).

- (d) restrict or prevent water supply work approvals on third order or higher streams,

**Note.** The rule in clause 50 (1) prevents water supply works in in-river dams on third or higher order streams within the Castlereagh River above Binnaway Water Source. This rule contributes to all objectives in subclause (2).

- (e) reserve a portion of natural flows to maintain hydrological connectivity between these water sources and other connected water sources.

**Note.** The rules in clauses 46, 46A and 46B of this Plan ensure that very low flows are protected from extraction, and establish flow classes that manage the take of water for the Castlereagh River above Binnaway Water Source. 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 objective in subclause (2) have contributed to achieving the broad objective, and
  - (b) external influences on these water sources 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) will be evaluated as follows:
- (a) by comparing changes, or trends in, the ecological condition of these water sources during the term of this Plan by measuring the following:
    - (i) the recorded range or extent of target populations including native fish and native vegetation, as described in Appendix 4,
    - (ii) the recorded condition of target populations of native fish, native vegetation and low flow macroinvertebrate communities, as described in Appendix 4,
    - (iii) measurements of carbon and nutrient transport processes and fish movements through priority fish passage areas, as described in Appendix 4,
    - (iv) the recorded values of water quality measurements including salinity, turbidity, total nitrogen, total phosphorous, pH, water temperature and dissolved oxygen,
    - (v) the extent to which the strategies in subclause (3) have provided flow conditions of sufficient magnitude, frequency, timing and water quality to achieve the targeted environmental objectives,
  - (b) by considering the extent to which changes in the ecological condition of performance indicators in these water sources can be attributed to the strategies in subclause (3) and the rules in this Plan,
  - (c) by considering the extent to which the strategies in subclause (3) and the rules in this Plan have been effectively implemented and complied with.

**Note.** The priority performance indicators used to measure the targeted environmental objectives, and the corresponding strategies and rules to achieve them, are described in Appendix 4.

## 11 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 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 clause 43 provide certainty in how water will be shared between individual access licence holders and different categories of access licences. These rules contribute to the objectives in subclause (2) (b) and (c).
  - (b) where possible, provide flexibility of access to water,  
**Note.** The individual account management rules in clause 43, including the limit on the volume of water that can be taken in any water year or over three consecutive water years and the amount of water that may be carried over from one water year to the next, provide flexibility that reflects the characteristics of the licence category. These rules contribute to the objectives in subclause (2) (b) and (c).
  - (c) manage extractions to the long-term extraction limit and provide rules for managing extractions within that extraction limit that recognise different climatic conditions in different years, including during drought,  
**Note.** The application of the long-term average annual extraction limit and the assessment and compliance rules in Part 6 of this Plan manage extractions to different climatic conditions in different years. These rules contribute to the objectives in subclause (2) (b) and (c).
  - (d) provide for trade of water allocations and entitlements within and between low risk water sources, subject to environmental constraints.  
**Notes.**
    - 1 **Low risk water sources** are defined in the Dictionary.
    - 2 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 location to another. These rules contribute to the objective in subclause (2) (a).
- (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 (2) have contributed to achieving the broad objective, and
  - (b) external influences on these water sources 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, 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 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 annual weighted average price of water traded within these water sources,  
**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.

## 12 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 maintain or improve access to water for holders of native title,
  - (b) to maintain or improve 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 cultural areas, including culturally 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 as follows:

- (a) manage access to water consistent with native title rights,

**Note.** The rules in clause 20 of this Plan ensure the provision of water associated with a native title determination. This rule contributes to the objective in subclause (2) (a).

- (b) provide for water associated with Aboriginal cultural values and uses,

**Note.** The rules in Part 7 of this Plan provide opportunities for Aboriginal people to access water by allowing for the granting of an access licence of the subcategory 'Aboriginal cultural'. This rule contributes to the objectives in subclause (2) (b) and (c).

- (c) reserve a portion of natural flows to mitigate alterations to natural flow regimes in these water sources,

**Note.** The rules in clauses 46, 46A and 46B of this Plan ensure that very low flows are protected from extraction, and establish flow classes that manage the take of water for the Castlereagh River above Binnaway Water Source. These rules contribute to the objectives in subclause (2) (b), (c) and (d).

- (d) restrict the take of water from in-river and off-river pools when the volume of that water is less than full capacity,

**Note.** The rules in clauses 46 (3) and 46B (4) and (5) of this Plan restrict the take of water from in-river and off-river pools when the volume is less than full capacity, thereby contributing to the protection of native fish populations, swimming and recreational areas and riparian vegetation. These rules contribute to the objectives in subclause (2) (b), (c) and (d).

- (e) reserve a portion of natural flows to maintain hydrological connectivity between water sources and other connected water sources.

**Note.** The rules in clauses 46, 46A and 46B of this Plan ensure that very low flows are protected from extraction, and establish flow classes that manage the take of water for the Castlereagh River above Binnaway Water Source. These rules 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 (2) have contributed to achieving the broad objective, and

- (b) external influences on these water sources during the term of this Plan have affected progress toward achieving the broad objective.

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

- (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 peoples by measuring:

- (i) the extent to which native title rights have been met, 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, as described in Appendix 4,
- (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 cultural uses and values,
- (f) by considering the extent to which changes in the Aboriginal cultural use of water can be attributed to the strategies in subclause (3) and rules in this Plan.

## 12A Social and cultural objectives

- (1) The broad social and cultural objective of this Plan is 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 the following:
  - (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 important for recreational fishing may 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, and for domestic and stock purposes,  
**Note.** Part 3 of this Plan ensures that water is available for basic human needs, town water supply and domestic and stock purposes. These rules contribute to all objectives in subclause (2).

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

**Note.** The rules in clauses 46, 46A and 46B of this Plan ensure that very low flows are protected from extraction, and establish flow classes that manage the take of water for the Castlereagh River above Binnaway Water Source. These rules contribute to all objectives in subclause (2).

- (c) restrict the take of water from in-river and off-river pools when the volume of that water is less than full capacity,

**Note.** The rules in clauses 46 (3) and 46B (4) and (5) of this Plan restrict the take of water from in-river and off-river pools when the volume is less than full capacity. These rules contribute to all objectives in subclause (2).

- (d) reserve a portion of natural flows to maintain hydrological connectivity between these water sources and other connected water sources.

**Note.** The rules in clauses 46, 46A and 46B of this Plan ensure that very low flows are protected from extraction and establish flow classes that manage the take of water for the Castlereagh River above Binnaway Water Source. 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 social and cultural objective 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 (2) have contributed to achieving the broad objective, and
- (b) external influences on these water sources 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 and changes in climate, 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, as described in Appendix 4,

- (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, as described in Appendix 4,
- (d) by comparing changes, or trends in, the recorded values of water quality measurements including salinity, harmful algal blooms, total nitrogen, total phosphorus, pH, water temperature and dissolved oxygen,
- (e) 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.

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## **Part 3 Bulk access regime**

### **13 Bulk access regime**

- (1) This Plan establishes a bulk access regime for the extraction of water under access licences in these water sources, having regard to:
  - (a) the environmental water rules established 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 these water sources:
  - (a) recognises and is consistent with the limits to the availability of water set in relation to these water sources, contained in Division 1 of Part 6 of this Plan,
  - (b) establishes rules according to which access licences are to be granted and managed, contained in Parts 7 and 8 of this Plan and available water determinations to be made contained in Division 2 of Part 6 of this Plan,
  - (c) recognises the effect of climatic variability on the availability of water as described in clause 14,
  - (d) establishes rules with respect to 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 6 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.

### **14 Climatic variability**

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

- (a) manage the sharing of water 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 6 of this Plan, and

- (b) manage the sharing of water in specified water sources on a daily basis, contained in Division 2 of Part 8 of this Plan.

**Note.** Other statutory tools are available to manage 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.

### 15 General

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

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

### 16 Commitment and identification of planned environmental water

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

- (a) by reference to the commitment of the physical presence of water in the water source,
- (b) by reference to the long-term average annual commitment of water as planned environmental water, and
- (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.

### 17 Establishment and maintenance of planned environmental water

- (1) This Plan establishes planned environmental water in these water sources as follows:
  - (a) the physical presence of water resulting from the access rules specified in Division 2 of Part 8 of this Plan,

**Note.** The rules in Division 2 of Part 8 of this Plan set flow levels below which the taking of water is not permitted. Some limited exemptions apply.
  - (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 28, and
  - (c) the water remaining after water has been taken under basic landholder rights and access licences, in accordance with the rules specified in Part 6 and Part 8 of this Plan.
- (2) The planned environmental water established under subclause (1) (a) is maintained by the rules specified in Division 2 of Part 8 of this Plan.
- (3) The planned environmental water established under subclause (1) (b) is maintained by the rules specified in Part 6 of this Plan.

- (4) The planned environmental water established under subclause (1) (c) is maintained by the rules specified in Parts 6 and 8 of this Plan.

**Note.** The rules in Part 6 ensure that there will be water remaining in these water sources over the long-term by maintaining compliance with the long-term average annual extraction limit. The rules in Part 6 provide for a reduction in available water determinations when the long-term average annual extraction limit has been assessed to have been exceeded.

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## Part 5 Requirements for water

### Division 1 General

#### 18 Application

- (1) This Part identifies the requirements for water from these water sources for basic landholder rights (Division 2) and for extraction under access licences (Division 3).
- (2) The amounts of water specified in this Part represent the estimated water requirements of persons entitled to basic landholder rights in these water sources and the total volumes or unit shares specified in the share components of all access licences in these water sources. The actual volumes of water available for extraction in these water sources at any time will depend on factors such as climatic variability, access licence priority and the rules in this Plan.
- (3) This Plan recognises that basic landholder rights in these water sources and the total share components of all access licences authorised to extract water from these water sources may change during the term of this Plan. This Plan manages such changes by having provisions that manage the sharing of water within the limits of water availability, as provided for in Division 1 of Part 6 of this Plan.

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

- (a) the granting, surrender or cancellation of access licences in these water sources,
- (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

#### 19 Domestic and stock rights

The water requirements of persons entitled to domestic and stock rights in these water sources are estimated to total 2.59 megalitres per day (hereafter *ML/day*), distributed as follows:

- (a) 1.19 ML/day in the Binnaway to Gilgandra Water Source,
- (b) 0.23 ML/day in the Castlereagh River below Coonamble Water Source,
- (c) 0.17 ML/day in the Castlereagh River Gilgandra to Coonamble Water Source,
- (d) 0.10 ML/day in the Nedgera Creek Water Source,
- (e) 0.16 ML/day in the Teridgerie Creek Water Source,
- (f) 0.29 ML/day in the Tooraweenah to Coonamble Tributaries Water Source, and

- (g) (Repealed)
- (h) 0.45 ML/day in the Castlereagh River above Binnaway Water Source.

**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 these water sources should not be consumed without first being tested and if necessary, appropriately treated. Such testing and treatment is the responsibility of the water user.

## **20 Native title rights**

On the commencement of this Plan, no determinations of native title have been made in relation to these water sources 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 native title rights may occur pursuant to the provisions of the *Native Title Act 1993* (Cth).

## **21 Harvestable rights**

The requirements for water under harvestable rights in these water sources is equal to the total amount of water that owners or occupiers of landholdings are entitled to capture and store, pursuant to a harvestable rights order made under Division 2 of Part 1 of Chapter 3 of the Act.

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

### **22 Share components of domestic and stock access licences**

It is estimated that the share components of domestic and stock access licences authorised to take water from these water sources total 399 ML/year, distributed as follows:

- (a) 105 ML/year in the Binnaway to Gilgandra Water Source,
- (b) 34 ML/year in the Castlereagh River below Coonamble Water Source,
- (c) 147 ML/year in the Castlereagh River Gilgandra to Coonamble Water Source,
- (d) 32 ML/year in the Nedgera Creek Water Source,
- (e) 57 ML/year in the Teridgerie Creek Water Source,
- (f) 20 ML/year in the Tooraweenah to Coonamble Tributaries Water Source, and
- (g) (Repealed)
- (h) 4 ML/year in the Castlereagh River above Binnaway Water Source.

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

It is estimated that the share components of local water utility access licences authorised to take water from these water sources total 2,779 ML/year, distributed as follows:

- (a) 175 ML/year in the Binnaway to Gilgandra Water Source,
- (b) 0 ML/year in the Castlereagh River below Coonamble Water Source,
- (c) 1,608 ML/year in the Castlereagh River Gilgandra to Coonamble Water Source,
- (d) 0 ML/year in the Nedgera Creek Water Source,
- (e) 0 ML/year in the Teridgerie Creek Water Source,
- (f) 37 ML/year in the Tooraweenah to Coonamble Tributaries Water Source, and
- (g) (Repealed)
- (h) 959 ML/year in the Castlereagh River above Binnaway Water Source.

### **24 Share components of unregulated river access licences**

It is estimated that the share components of unregulated river access licences authorised to take water from these water sources total 17,312 unit shares, distributed as follows:

- (a) 8,253 unit shares in the Binnaway to Gilgandra Water Source,
- (b) 1,512 unit shares in the Castlereagh River below Coonamble Water Source,
- (c) 3,190 unit shares in the Castlereagh River Gilgandra to Coonamble Water Source,
- (d) 0 unit shares in the Nedgera Creek Water Source,
- (e) 48 unit shares in the Teridgerie Creek Water Source,
- (f) 69 unit shares in the Tooraweenah to Coonamble Tributaries Water Source, and
- (g) 4,240 unit shares in the Castlereagh River above Binnaway Water Source.

### **25 (Repealed)**

### **26 Share components of unregulated river (special additional high flow) access licences**

It is estimated that the share components of unregulated river (special additional high flow) access licences authorised to take water from these water sources total 3,330 unit shares, distributed as follows:

- (a) 3,330 unit shares in the Castlereagh River below Coonamble Water Source, and
- (b) 0 unit shares in all other water sources.

## Part 6 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

#### 27 General

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

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

- (1) (Repealed)
- (2) The long-term average annual extraction limit for these water sources is:
  - (a) the annual extraction of water averaged over the period from 1 July 1993 to 30 June 1999 under entitlements issued under Part 2 of the *Water Act 1912* from these water sources, plus
  - (b) the annual water requirements pursuant to basic landholder rights in the following water sources at the commencement of this Plan:
    - (i) Binnaway to Gilgandra Water Source,
    - (ii) Castlereagh River below Coonamble Water Source,
    - (iii) Castlereagh River Gilgandra to Coonamble Water Source,
    - (iv) Nedgera Creek Water Source,
    - (v) Teridgerie Creek Water Source, and
    - (vi) Tooraweenah to Coonamble Tributaries Water Source, plus
  - (c) the annual water requirements pursuant to basic landholder rights in the Castlereagh River above Binnaway Water Source at the commencement of the *Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003*, plus
  - (d) the annual extraction of water averaged over the period from 1 July 1993 to 30 June 1999 by floodplain harvesting activities in these water sources, plus
  - (e) an estimate of the annual take of water from these water sources by plantation forestry that existed on 30 June 2009, minus
  - (f) an amount that reflects any change to the amount of water committed as licensed environmental water as determined under section 8F of the Act.

**Note.** The volume of the long-term average annual extraction limit is equal to the volume specified in Schedule 3 to the Basin Plan Item 12 (Macquarie - Castlereagh SDL Resource Unit), column 2(b), as it relates to these water sources. The sustainable diversion limit for the Macquarie-Castlereagh SDL Resource Unit also includes extraction under the Water Sharing Plan for the *Macquarie and Cudgegong Regulated Rivers Water Sources 2016* and *Water Sharing Plan for the Macquarie Bogan Unregulated Water Sources 2012*.

(3) (Repealed)

(4) (Repealed)

## 29 Calculation of annual extraction

After the end of each water year, the total volume of water taken during that water year by or under each of the following must be determined for these water sources:

- (a) all categories of access licences, but excluding any take of licensed environmental water,
- (b) basic landholder rights,
- (c) floodplain harvesting, and
- (d) plantation forestry.

## 30 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 these water sources:

- (a) an assessment of compliance with the long-term average annual extraction limit in accordance with subclause (2),
- (b) an assessment of compliance with the Basin Plan long-term annual diversion limit in accordance with subclause (3).

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

- (2) An assessment of compliance with the long-term average annual extraction limit is to compare the long-term average annual extraction limit established under clause 28 against the average of the annual extractions in the preceding five water years as determined under clause 29.
- (3) An assessment of compliance with the long-term annual diversion limit is to be conducted for these water sources 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 these water sources.

## 31 (Repealed)

## 32 Compliance with extraction limits

- (1) There is non-compliance with a limit:

- (a) if the assessment under clause 30 (2) demonstrates that the average of the annual extractions in the preceding five water years as determined under clause 29 exceeds the long term average annual extraction limit by 5% 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 available water determinations for unregulated river access licences for the following water year, and
  - (b) reduce the available water determinations for unregulated river (special additional high flow) access licences for the following water year.
- (3) Any reductions under subclause (2) must be:
- (a) to the extent that the Minister considers necessary to return average annual extractions to the long-term average annual extraction limit established in this Part, and
  - (b) made in the same amount under subclause (2) (a) and (b).

**Note.** Subclause (3)(b) means that any reduction in available water determinations for unregulated river access licences should be the same amount as a reduction in available water determinations for unregulated river (special additional flow) access licences.

### **33 (Repealed)**

## **Division 2 Available water determinations**

### **34 General**

- (1) Available water determinations made for access licences with a share component that specifies one of these water sources are to be expressed as either:
  - (a) a percentage of the share component, for access licences which have share components specified as megalitres per year, or
  - (b) megalitres per unit share, for access licences which have share components 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 one of these water sources must not, in any water year, exceed:
  - (a) 100% of the access licence share component or such lower amount that results from Division 1 of this Part, for all access licences with share components specified as megalitres per year, or

- (b) 1 megalitre per unit share of the access licence share component or such lower amount that results from Division 1 of this Part, for all access licences where share components are specified as a number of unit shares.

(3) (Repealed)

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

(1) (Repealed)

(2) (Repealed)

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

(4) (Repealed)

### **36 Available water determinations for local water utility access licences**

(1) (Repealed)

(2) (Repealed)

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

(4) (Repealed)

### **37 Available water determinations for unregulated river access licences**

(1) (Repealed)

(2) (Repealed)

(3) Unless the Minister otherwise determines, at the commencement of each water year an available water determination of 1 ML per unit of share component is to be made for unregulated river access licences.

**Note.** Division 1 of this Part provides for available water determinations for unregulated river access licences to be reduced where the long-term average annual extraction limit for these water sources has been assessed to have been exceeded, as per clause 32.

### **38 Available water determinations for unregulated river (special additional high flow) access licences**

(1) (Repealed)

(2) (Repealed)

- (3) Unless the Minister otherwise determines, at the commencement of each water year an available water determination of 1 ML per unit of share component is to be made for unregulated river (special additional high flow) access licences..

**Note.** Clause 32 of Division 1 of this Part provides that available water determinations for unregulated river (special additional high flow) access licences may be reduced where there has been non-compliance with the long-term average annual extraction limit for these water sources.

**39 (Repealed)**

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## Part 7 Rules for granting access licences

### Notes.

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

### 40 Specific purpose access licences

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

- (1) A specific purpose access licence must not be granted in these water sources unless the Minister is satisfied that the share and extraction component of the access licence is the minimum required to meet the circumstances in which the access licence is proposed to be used.
- (2) Applications for specific purpose access licences, other than those permitted under the Regulation, must not be made in these water sources.
- (3) An access licence of the subcategory “Aboriginal cultural” must not be granted in these water sources unless the share component of the proposed access licence is less than or equal to 10 ML/year.
- (4) An access licence of the subcategory “Aboriginal cultural” may only be granted for the taking of water by an Aboriginal person or Aboriginal community for any personal, domestic or communal purpose, including drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, gathering and for recreational, cultural and ceremonial purposes.

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

### 41 (Repealed)

## Part 8 Rules for managing access licences

### Division 1 Water allocation account management rules

#### 42 (Repealed)

**Note.** The Act provides for the keeping of water allocation accounts. The rules in this Division impose further limits on the volume of water that may be taken under an access licence over a specified period of time. These limits are in addition to any other limits on access licences for the taking of water contained in this Plan. For further clarification, these rules do not authorise the taking of more water than is credited to the respective water allocation account for the access licence at the time water is taken. It is an offence under the Act to take more water than is credited to the water allocation account for an access licence.

#### 43 Individual access licence account management rules

- (1) The rules in this clause apply to the taking of water under an access licence with a share component that specifies one of these water sources.
- (2) (Repealed)
- (3) For the period of any three consecutive water years after the first water year in which this Plan has effect, the maximum volume of water that may be taken under a domestic and stock access licence, a local water utility access licence or an unregulated river access licence in in these water sources must not exceed a volume equal to the lesser of:
  - (a) the sum of:
    - (i) water allocations accrued to the water allocation account for the access licence from available water determinations in those three water years,
    - (ii) the water allocations carried over from the water year prior to those three water years under subclause (5),
    - (iii) the net amount of any water allocations assigned to or from the water allocation account for the access licence under section 71T of the Act, in those three water years, and
    - (iv) any water allocations recredited to the water allocation account for the access licence in accordance with section 76 of the Act, in those three water years, or
  - (b) the sum of:
    - (i) the share component of the access licence at the beginning of the first of those three water years,
    - (ii) the share component of the access licence at the beginning of the second of those three water years,

- (iii) the share component of the access licence at the beginning of the third of those three water years,
  - (iv) the net amount of any water allocations assigned to or from the water allocation account for the access licence under section 71T of the Act, in those three water years, and
  - (v) any water allocations recredited to the water allocation account for the access licence in accordance with section 76 of the Act, in those water years.
- (4) In any water year, the maximum volume of water that may be taken under an unregulated river (special additional high flow) access licence in these water sources must not exceed a volume equal to:
- (a) the water allocations accrued to the water allocations account for the access licence from available water determinations in that water year, plus
  - (b) the net amount of any water allocations assigned to and from the water allocation account for the access licence under section 71T of the Act in that water year, plus
  - (c) any water allocations re-credited to the water allocation account for the access licence in accordance with section 76 of the Act in that water year.
- (5) For a domestic and stock access licence, a local water utility access licence or an unregulated river access licence, any water allocations remaining in the water allocation account are to be carried over from one water year to the next, up to a maximum of:
- (a) 100% of the access licence share component, for access licences with share components expressed as ML/year, or
  - (b) 1 ML per unit share of access licence share component, for access licences with share components expressed as a number of unit shares.
- (6) Water allocations remaining in the water allocation account for an unregulated river (special additional high flow) access licence in these water sources cannot be carried over from one water year to the next.

#### **44 (Repealed)**

### **Division 2 Flow classes and daily access rules**

#### **45 General**

The rules in this Division apply to the taking of water under an access licence with a share component that specifies one of these water sources.

**Note.** Part 12 allows for amendments to be made to Division 2 of Part 8.

**46 Access rules for the taking of surface water from these water sources, excluding the Castlereagh River above Binnaway Water Source**

- (1) This clause applies to the taking of water under an access licence from these water sources, excluding the taking of water:
- (a) (Repealed)
  - (b) from the Castlereagh River above Binnaway Water Source,
  - (c) in association with an aquifer interference activity that is or is part of an approved EP&A Act development when:
    - (i) in the Minister's opinion, there are no reasonably practicable measures the access licence holder can take to comply with the access rules under this clause, and
    - (ii) the access licence holder has a water management plan for the aquifer interference activity, that has been approved in accordance with the development consent for the activity under the *Environmental Planning and Assessment Act 1979*, and
    - (iii) the water management plan includes conditions that require the return of water to the water source to mitigate the taking of water during times when the access rules apply under this clause, or
- Note.** *Approved EP&A Act development* is defined in the Dictionary.
- (d) in association with an aquifer interference activity when:
    - (i) in the Minister's opinion, there are no reasonably practicable measures the access licence holder can take to comply with the access rules under this clause, and
    - (ii) the access licence holder has a water management plan for that aquifer interference activity that has been approved by the Minister, and
    - (iii) the water management plan provides that water will be returned to the water source to mitigate the taking of water during times when the access rules apply under this clause.
- (2) Subject to subclause (7), water must not be taken under an access licence if there is no visible flow at the location at which water is proposed to be taken. This subclause does not apply to the taking of water:
- (a) under an access licence to which subclause (4) or (5) applies, or

- (b) from a natural pool, lagoon or lake that is not within a river or stream (regardless of stream size), is on a flood-runner or floodplain, or is on an effluent that only commences to flow during high flows.
- (3) Subject to subclause (7), water must not be taken under an access licence from a natural pool, lagoon or lake that is not within a river or stream (regardless of stream size), is on a flood-runner or floodplain, or is on an effluent that only commences to flow during high flows, when the water level in that pool, lagoon or lake is less than the full capacity of the respective pool, lagoon or lake.

**Note.** *Full capacity* is defined in the Dictionary.

- (4) Subject to subclause (7), water must not be taken under an access licence specified in Column A of the table in Schedule 3, with a share component that specifies the water source in Column B of that, in contradiction of the access rule specified in Column C of that table.
- (5) Water must not be taken under an access licence specified in Column A of the table in Schedule 1A, with a share component that specifies the water source in Column B of that table, in contradiction of the access rule specified in Column C of the table.

**Note.** Those licences and their cease to take conditions have been identified as having pre-existing cease to pump thresholds higher than the upper limit of the relevant cease to take conditions specified in Schedule 1A.

- (6) Subject to subclause (7), while there is no visible flow at the location at which water is proposed to be taken, water must not be taken for any 24-hour period starting at 18:00 on an even-numbered calendar day under an access licence that nominates a water supply work (spearpoint) within the alluvial sand beds of the following water source or management zone:

- (a) Castlereagh River Binnaway to Gilgandra Management Zone of the Binnaway to Gilgandra Water Source, or
- (b) Castlereagh River Gilgandra to Coonamble Water Source.

**Note.** Examples of even-numbered calendar days include January 2, 4, 6, etc.

- (7) Subclauses (2)–(4) and (6) do not apply to the following:
- (a) the taking of water under an access licence or an access licence which replaces a *Water Act 1912* entitlement to which clause 1 of Schedule 2 applies, for any of the purposes listed below, provided that the volume of water taken does not exceed 20 kilolitres per day per access licence or such lower amount specified on the access licence in accordance with subclause (8):
- (i) fruit washing,
- (ii) cleaning of dairy plant and equipment for the purpose of hygiene,

- (iii) poultry watering and misting, or
  - (iv) cleaning of enclosures used for intensive animal production for the purposes of hygiene,
  - (b) the taking of water for domestic consumption only under a domestic and stock access licence or a domestic and stock (subcategory “domestic”) access licence that existed at the commencement of this Plan, provided that the volume of water taken does not exceed 1 kilolitre per house supplied by the access licence per day,
  - (c) (Repealed)
  - (d) the taking of water from a runoff harvesting dam or from an in-river dam pool, and
  - (e) the taking of water under a local water utility access licence or an access licence of the subcategory “Town water supply” to which clause 2 of Schedule 2 applies.
- (8) The Minister may amend a water supply work approval to reduce the maximum daily volume limit imposed by the rule under subclause (7) (a) if the Minister is satisfied that the reduced volume is satisfactory to meet the purpose referred to in subclause (7) (a).
- (9) Water must not be taken from an in-river dam pool unless the in-river dam is passing such flows as specified on the water supply work approval for the in-river dam.
- (10) The flows to be specified on the water supply work approval for the in-river dam referred to in subclause (9) are:
- (a) the flows that were specified in conditions on the *Water Act 1912* entitlement that the approval replaces, or
  - (b) where no flows were specified, the amount of flows determined by the Minister.

**Note.** Part 12 of this Plan allows for amendments to be made to clause 46.

#### **46A Flow classes for the Castlereagh River above Binnaway Water Source**

- (1) This Plan establishes the flow classes specified in Column 2 of Table B for the sharing of flows on a daily basis in the Castlereagh River above Binnaway Water Source.
- (2) Subject to clause (4), the flow classes in Column 2 of Table B are established for the management zone specified in Column 1 of Table B and for the access licence categories specified in Column 3 of Table B.
- (3) Subject to subclauses (4) and (5), a flow class applies in the respective management zone on the day specified in Column 5 of Table B when the flow (ML/day) as measured at the flow reference point is equal to the flow specified in Column 4 of Table B for the access licence category specified in Column 3 of Table B.

- (4) The flow classes in Table B do not take effect until such time as the Minister, by order published in the Gazette, prescribes the flow reference point to be used for the relevant flow class specified in Column 2 of Table B. The Minister will not prescribe any flow reference points under this clause unless in the Minister’s opinion, suitable infrastructure can be installed or appropriate infrastructure can be used as a flow reference point for the relevant flow class. Notification of flow class commencement will be provided in writing by the Department to all affected licence holders.

**Notes.**

- 1 Prior to the making of an order under subclause (4), the Minister will consult with access licence holders on the proposed flow reference point. The Minister will also take into account the socio-economic impacts of the commencement of flow classes and the environmental water requirements of the management zone.
- 2 **Infrastructure** is defined in the Dictionary.

- (5) If flow classes have commenced under subclause (4) and, in the Minister’s opinion, accurate flow data is not available on a particular day from a flow measuring gauge used to determine a flow class, then the Minister may determine the flow class that applies for that day and notify the licence holder in writing of the flow class that applies for that day. For the purpose of this subclause, notification includes publishing a notice on the Department’s website.

- (6) For the purpose of determining flow classes that apply on a particular day under subclause (5), the Minister may consider evidence of past and current flows and readings at other functioning upstream and downstream gauges.

**Note.** On days that accurate flow data is not available, holders of access licences may contact the Department’s office at the address listed in Appendix 3 or check the Department’s website to find out what flow class applies on that day.

**Note.** Only those management zones for which flow classes have been established are shown in Table B.

**Table B—Flow Classes**

Column 1 Management zone	Column 2 Flow class	Column 3 Access licence category	Column 4 Flow (ML/day)	Column 5 Day on which flow class applies
Timor Dam to Pound Yard Weir Management Zone	Very Low Flow Class	1. Domestic and stock access licences 2. Local water utility access licences	Less than or equal to 3.3 ML/day	Same day
	A Class		More than 3.3 ML/day	Same day
	Very Low Flow Class	Unregulated river access licences	Less than or equal to 7.1 ML/day	Same day
	A Class		More than 7.1 ML/day	Same day
Pound Yard Weir to Merryula Road Crossing Management Zone	Very Low Flow Class	1. Domestic and stock access licences 2. Local water utility access licences	Less than or equal to 3.1 ML/day	Same day
	A Class		More than 3.1 ML/day	Same day
	Very Low Flow Class	Unregulated river access licences	Less than or equal to 3.2 ML/day	Same day
	A Class		More than 3.2 ML/day	Same day
Merryula Road Crossing to Belar Creek Confluence Management Zone	Very Low Flow Class	1. Domestic and stock access licences 2. Local water utility access licences	Less than or equal to 2.4 ML/day	Same day
	A Class		More than 2.4 ML/day	Same day
	Very Low Flow Class	Unregulated river access licences	Less than or equal to 3 ML/day	Same day

Column 1 Management zone	Column 2 Flow class	Column 3 Access licence category	Column 4 Flow (ML/day)	Column 5 Day on which flow class applies
	A Class		More than 3 ML/day	Same day
Belar Creek Confluence to New Mollyann Road Management Zone	Very Low Flow Class	1. Domestic and stock access licences 2. Local water utility access licences	Less than or equal to 3.3 ML/day	Same day
	A Class		More than 3.3 ML/day	Same day
	Very Low Flow Class	Unregulated river access licences	Less than or equal to 4.3 ML/day	Same day
	A Class		More than 4.3 ML/day	Same day
Belar Creek Management Zone	Very Low Flow Class	1. Domestic and stock access licences 2. Local water utility access licences	Less than or equal to 1.6 ML/day	Same day
	A Class		More than 1.6 ML/day	Same day
	Very Low Flow Class	Unregulated river access licences	Less than or equal to 1.9 ML/day	Same day
	A Class		More than 1.9 ML/day	Same day

#### 46B Access rules for the taking of surface water from the Castlereagh River above Binnaway Water Source

(1) This clause applies to the taking of water under an access licence from the Castlereagh River above Binnaway Water Source, excluding the taking of water under an access licence used:

(a) in association with an aquifer interference activity that is or is part of an approved EP&A Act development when:

(i) in the Minister's opinion, there are no reasonably practicable measures the access licence holder can take to comply with the access rules under this clause, and

(ii) the access licence holder has a water management plan for the aquifer interference activity that has been approved in accordance with the development consent for the activity under the *Environmental Planning and Assessment Act 1979*, and

(iii) the water management plan includes conditions that require the return of water to the water source to mitigate the taking of water during times when the access rules apply under this clause, or

**Note.** *Approved EP&A Act development* is defined in the Dictionary.

(b) in association with an aquifer interference activity when:

(i) in the Minister's opinion, there are no reasonably practicable measures the access licence holder can take to comply with the access rules under this clause, and

(ii) the access licence holder has a water management plan for that aquifer interference activity that has been approved by the Minister, and

- (iii) the water management plan provides that water will be returned to the water source to mitigate the taking of water during times when the access rules apply under this clause.
- (2) Subject to subclause (6), water must not be taken under an access licence with an extraction component that specifies a management zone with a Very Low Flow Class that has commenced, when flows in that management zone are in the Very Low Flow Class. This subclause does not apply to:
  - (a) access licence 80AL700129, and
  - (b) the taking of water from an off-river pool.

**Note.** *Off-river pool* is defined in the Dictionary.
- (3) Subject to subclause (6), water must not be taken under an access licence when there is no visible flow at the location at which water is proposed to be taken. This subclause does not apply to the taking of water from:
  - (a) an in-river pool,
  - (b) an off-river pool, and
  - (c) access licence 80AL700129.

**Note.** *In-river pool* and *visible flow* are defined in the Dictionary.
- (4) Subject to subclause (6), water must not be taken under an access licence from an in-river pool when the volume in that pool is less than the full capacity of that pool.

**Note.** *Full capacity* is defined in the Dictionary.
- (5) Subject to subclause (6), water must not be taken from an off-river pool when the volume of water in that pool is less than the full capacity of the pool. This subclause does not apply to an access licence listed in Schedule 2A of this Plan.
- (6) Subclauses (2)–(5) do not apply to the following:
  - (a) the taking of water under an access licence to which clause 1 of Schedule 2A applies, for any of the purposes listed below, provided that the volume of water taken does not exceed 20 kilolitres per day per access licence or such lower amount specified in accordance with subclause (7):
    - (i) fruit washing,
    - (ii) cleaning of dairy plant and equipment for the purpose of hygiene,
    - (iii) poultry watering and misting,
    - (iv) cleaning of enclosures used for intensive animal production for the purposes of hygiene,

- (b) the taking of water for domestic consumption only under a domestic and stock access licence or a domestic and stock (subcategory “domestic”) access licence that existed at the commencement of the *Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003*, provided that the volume of water taken does not exceed 1 kilolitre per house supplied by the access licence per day,  
**Note.** The *Water Sharing Plan for the Castlereagh River above Binnaway Water Source 2003* commenced on 1 July 2004.
  - (c) the taking of water using a runoff harvesting dam,
  - (d) the taking of water from an in-river dam pool when the in-river dam is passing all inflows,
  - (e) the taking of water under a local water utility access licence or an access licence of the subcategory “Town water supply” to which clause 2 of Schedule 2A applies.
- (7) The Minister may reduce the maximum daily volume limit imposed by the rule under subclause (6) (a) for an access licence if the Minister is satisfied that the reduced volume is sufficient to meet the relevant purpose referred to in that subclause.

**Note.** The method by which the Minister can reduce the maximum daily volume limit is by amending the mandatory conditions of the relevant water supply work approval. Under section 102 (3) of the Act, the mandatory conditions of an approval may be imposed, amended, revoked or suspended by the Minister whenever it is necessary to do so in order to enable compliance with or to give effect to a relevant management plan.

#### **47 Total daily extraction limits**

At the commencement of this Plan, total daily extraction limits (hereafter TDELs) are not established for any access licences in these water sources.

**Notes.**

- 1 TDELs are an assessment tool only and will be used by the Department to determine which access licences (if any) may require individual daily extraction limits. They do not require any action to be taken by the licence holder. However, continued exceedance of the TDEL by all water users will trigger the amendment of this Plan to allow for the imposition of individual daily extraction limits under clause 48.
- 2 Part 12 of this Plan allows for amendments to be made to establish TDELs.

#### **48 Individual daily extraction limits**

- (1) At the commencement of this Plan, there are no individual daily extraction limits (hereafter *IDELs*) established for access licences in these water sources.
- (2) If the Minister is satisfied that an assessment of daily extraction under access licences for which a TDEL is established under clause 47 indicates that extraction under the access licences exceeds the TDEL, the Minister may amend the extraction component of an access licence under section 68A of the Act to impose an IDEL on any one or more of those access licences.

**Note.** Part 12 of this Plan allows for amendments to be made to establish IDELs.

## Part 9 Rules for water supply work approvals

### Notes.

- 1 This Part is made in accordance with sections 5, 21 and 95 of the Act.
- 2 Part 12 allows for amendments to be made to this Part.

### Division 1 Rules applying to water supply works that take surface water

#### 49 General

The rules in this Division apply to water supply work approvals for water supply works authorised to take water from these water sources.

#### 50 Granting or amending water supply work approvals

- (1) A water supply work approval must not be granted or amended to authorise an in-river dam on a third order or higher stream within the Castlereagh River above Binnaway Water Source.

### Notes.

- 1 Water supply work approvals may be granted or amended for in-river dams on third order or higher streams within all water sources and management zones to which this Plan applies, other than those specified in subclause (1), consistent with the NSW Weirs Policy, the principles of the Act, the *Fisheries Management Act 1994* and any other relevant legislation.
  - 2 **Runoff harvesting dam** and **stream order** are defined in the Dictionary.
- (2) (Repealed)

### Division 2 (Repealed)

#### 51 - 57 (Repealed)

## 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 Macquarie 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.

### **58 General**

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

#### **Notes.**

- 1 Access licence dealings in these water sources are subject to the provisions of the Act, the regulations, the *Access Licence Dealing Principles Order 2004* and the access licence dealing rules established in this Part.
- 2 The *Access Licence Dealing Principles Order 2004* prevails over the access licence dealing rules in this Plan to the extent of any inconsistency, as provided under section 71Z (3) of the Act.

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

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

### **60 Assignment of rights dealings**

- (1) This clause relates to dealings under section 71Q of the Act in these water sources.
- (2) Dealings under section 71Q of the Act within the same water source are prohibited in these water sources if the dealing involves an assignment of rights from:
  - (a) an access licence with an extraction component that specifies the Castlereagh River Binnaway to Gilgandra Management Zone in the Binnaway to Gilgandra Water Source to an access licence with an extraction component that specifies the

Binnaway to Gilgandra Tributaries Management Zone in the Binnaway to Gilgandra Water Source,

- (b) an access licence with an extraction component that specifies the Binnaway to Gilgandra Tributaries Management Zone in the Binnaway to Gilgandra Water Source to an access licence with an extraction component that specifies the Castlereagh River Binnaway to Gilgandra Management Zone in the Binnaway to Gilgandra Water Source,
  - (c) an access licence with an extraction component that specifies a management zone in the Castlereagh River above Binnaway Water Source to an access licence with an extraction component that specifies another management zone in the Castlereagh River above Binnaway Water Source, or
  - (d) an access licence that does not nominate a water supply work located on Shawns Creek in the Castlereagh River above Binnaway Water Source to an access licence that does nominate a water supply work located on Shawns Creek in the Castlereagh River above Binnaway Water Source.
- (3) Dealings under section 71Q of the Act between water sources within the same water management area are prohibited in these water sources.

#### **61 Amendment of share component dealings (change of water source)**

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

#### **62 Amendment of extraction component dealings**

- (1) This clause relates to dealings under section 71S of the Act in these water sources.
- (2) Dealings under section 71S of the Act are prohibited if the dealing involves:
  - (a) an access licence with an extraction component that specifies the Castlereagh River Binnaway to Gilgandra Management Zone in the Binnaway to Gilgandra Water Source being varied to specify the Binnaway to Gilgandra Tributaries Management Zone in the Binnaway to Gilgandra Water Source,
  - (b) an access licence with an extraction component that specifies the Binnaway to Gilgandra Tributaries Management Zone in the Binnaway to Gilgandra Water Source being varied to specify the Castlereagh River Binnaway to Gilgandra Management Zone in the Binnaway to Gilgandra Water Source, or
  - (c) an access licence with an extraction component that specifies a management zone in the Castlereagh River above Binnaway Water Source being varied to specify

another management zone in the Castlereagh River above Binnaway Water Source.

### **63 Assignment of water allocation dealings**

- (1) This clause relates to dealings under section 71T of the Act in these water sources.
- (2) Dealings within a water source under section 71T of the Act are prohibited if the dealing involves an assignment of water allocation:
  - (a) from an access licence with an extraction component that specifies the Castlereagh River Binnaway to Gilgandra Management Zone in the Binnaway to Gilgandra Water Source to an access licence with an extraction component that specifies the Binnaway to Gilgandra Tributaries Management Zone in the Binnaway to Gilgandra Water Source, or
  - (b) from an access licence with an extraction component that specifies the Binnaway to Gilgandra Tributaries Management Zone in the Binnaway to Gilgandra Water Source to an access licence with an extraction component that specifies the Castlereagh River Binnaway to Gilgandra Management Zone in the Binnaway to Gilgandra Water Source, or
  - (c) from an unregulated river (special additional high flow) access licence to an access licence of another category, or
  - (d) from an access licence with an extraction component that specifies a management zone in the Castlereagh River above Binnaway Water Source to an access licence with an extraction component that specifies another management zone in the Castlereagh River above Binnaway Water Source, or
  - (e) from an access licence that does not nominate a water supply work located on Shawns Creek in the Castlereagh River above Binnaway Water Source to an access licence that does nominate a water supply work located on Shawns Creek in the Castlereagh River above Binnaway Water Source.
- (3) Dealings between water sources under section 71T of the Act are prohibited in these water sources.

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

- (1) This clause relates to dealings under section 71U or 71V of the Act in these water sources.
- (2) Dealings involving the interstate transfer of an access licence to or from these water sources are prohibited.

- (3) Dealings involving the interstate assignment of water allocations to or from access licences in these water sources are prohibited.

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

- (1) This clause relates to dealings under section 71W of the Act in these water sources.
- (2) Dealings under section 71W of the Act are prohibited if the dealing involves:
  - (a) an access licence being amended to nominate a water supply work located in a different management zone to that specified in the extraction component of the access licence, or
  - (b) an access licence that does not nominate a water supply work located in Shawns Creek in the Castlereagh River above Binnaway Water Source being amended to nominate a water supply work located in Shawns Creek in the Castlereagh River above Binnaway Water Source.
- (3) Dealings under section 71W of the Act that involve the nomination of a water supply work located in a State other than NSW, by access licences in these water sources, are prohibited.
- (4) Dealings under section 71W of the Act that involve the nomination of a water supply work in these water sources, by an access licence from a State other than NSW, are prohibited.

## Part 11 Mandatory conditions

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

### Division 1 General

#### 66 General

In this Part:

- (a) a requirement to notify the Minister in writing will only be satisfied by writing to the address listed in Schedule 6 of this Plan or to the email address for enquiries on the Department's website, and

**Note.** The email address for the Department's website is [water.enquiries@dpi.nsw.gov.au](mailto:water.enquiries@dpi.nsw.gov.au).

- (b) a *metered water supply work with a data logger* means a water supply work with:
- (i) a meter that complies with Australian Standard AS 4747, *Meters for non-urban water supply*, as may be updated or replaced from time to time, and
- (ii) a data logger, and
- (c) if the holder of a water supply work approval is the same as the holder of the access licence under which water is proposed to be taken, then it is not necessary to maintain two separate Logbooks and all the required information can be kept in one Logbook.

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

#### **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.

#### 67 General

- (1) Access licences in these water sources must have mandatory conditions to give effect to the following:
- (a) the relevant water allocation account management rules specified in Division 1 of Part 8 of this Plan,

- (b) the relevant access rules for the taking of water specified in Division 2 of Part 8 of this Plan,
  - (c) the holder of the access licence, upon becoming aware of a breach of any conditions, must:
    - (i) notify the Minister as soon as practicable, and
    - (ii) if the notification under subparagraph (i) was not in writing, confirm this notification in writing within 7 days of becoming aware of the breach,
  - (d) (Repealed)
- (2) Access licences in these water sources, excluding access licences that nominate only metered water supply works with a data logger, must have mandatory conditions 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 start and end time during which water was taken under the access licence,
    - (ii) the volume of water taken on each 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 taken on that date was used,
    - (v) (Repealed)
    - (vi) for domestic and stock access licences, local water utility access licences and unregulated river access licences with share components that specify one of these water sources, the volume of water taken in any three consecutive water years after the first water year of this Plan, by comparison to the volume of water permitted to be taken in those years under clause 43 (3),
    - (vii) for unregulated river (special additional high flow) access licences with share components that specify one of these water sources, the volume of water taken in a water year by comparison to the volume of water permitted to be taken in that water year under clause 43 (4),
    - (viii) (Repealed)
    - (ix) any other information required to be recorded in the Logbook under the rules of this Plan,

- (c) the holder of an access licence must produce the Logbook to the Minister for inspection, when requested,
  - (d) the holder of an access licence must retain the information required to be recorded in the Logbook for five years from the date to which that information relates.
- (3) The Minister may require the holder of the access licence that nominates only a metered water supply work with a data logger to keep a Logbook in accordance with any requirements of subclause (2).
- (4) (Repealed)

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

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

#### **68 General**

- (1) Water supply work approvals for water supply works in these water sources must have mandatory conditions to give effect to the following:
- (a) 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 Standard AS 4747, *Meters for non-urban water supply*, as may be updated or replaced from time to time,
    - (iii) the metering equipment must be operated and maintained in a proper and efficient manner at all times,
    - (iv) the metering equipment must be sited and installed at a place in the pipe, channel or conduit between the water source and the first discharge outlet. There must be no flow of water out of the pipe, channel or conduit between the water source and the metering equipment, and
    - (v) any other requirements as to type, standard or other criteria for the metering equipment specified in the notice,
- Note.** The Minister may direct a landholder or person to install, replace or properly maintain metering equipment under section 326 of the Act.
- (b) if a water supply work is no longer to be used permanently, then the approval holder of that work must decommission that work and provide the Minister with notice in writing that the approval holder intends to decommission the water

supply work. This notice must occur at least 90 days prior to the date of commencement of decommissioning,

- (c) upon receiving notice of the intention to decommission from the approval holder under paragraph (b), the Minister may, by notice in writing, require the water supply work not to be decommissioned, or the water supply work that be decommissioned in accordance with other requirements. These requirements may be specified by the Minister in a work plan,

**Note.** If a notice in writing is required from the Minister regarding the decommissioning of a water supply work, this notice will be sent to the approval holder within 60 days of the notice under paragraph (b) being sent.

- (d) if the approval holder receives a notice from the Minister under paragraph (c) the approval holder must proceed with decommissioning the water supply work in accordance with any requirements in that notice,
- (e) if the approval holder does not receive a notice from the Minister under paragraph (c) within 60 days of providing notice of the intent to decommission under paragraph (b), the approval holder must decommission the water supply work,
- (f) within 60 days of the water supply work being decommissioned under paragraphs (d) or (e), the approval holder must notify the Minister in writing that the water supply work has been decommissioned and provide the name of the driller who decommissioned the work.

(g) (Repealed)

(h) (Repealed)

(2) Water supply work approvals for water supply works in these water sources, excluding a water supply work that is a metered water supply work with a data logger, or is used for the purpose of taking water under basic landholder rights only, 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,
  - (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,
  - (d) the holder of a water supply work approval must retain the information required to be recorded in the Logbook for five years from the date to which that information relates.
- (3) The Minister may require the holder of a water supply work approval for a metered water supply work with a data logger to keep a Logbook in accordance with any requirements of subclause (2).
- (4) All water supply work approvals must contain mandatory conditions to require that the water supply work must not be used to take water unless, before water is taken, the holder of the water supply work approval confirms that the relevant cease to take conditions do not apply. Where the holder is required to keep a Logbook, the holder must record that confirmation and the means of confirmation (such as visual inspection or internet search), in the Logbook.
- (5) Water supply work approvals for runoff harvesting dams and in-river dams must have a mandatory condition that approval holders must comply with any direction by the Minister to modify or remove the dam to ensure that the capability of the dam to capture water is reduced to reflect any reduction in share components arising from:
- (a) a dealing under section 71Q or 71W of the Act,
  - (b) the surrender under section 77 (4) of the Act of an access licence and then the subsequent cancellation of an access licence under section 77A (6) of the Act,

- (c) the amendment of the share component of the access licence by the Minister under section 68A of the Act, or
- (d) the cancellation of an access licence under section 78 of the Act or via the compulsory acquisition of an access licence under section 79 of the Act.

**69 (Repealed)**

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## Part 12 Amendment of this Plan

### 70 General

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

### 71 Part 1

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

- (a) apply this Plan to new or additional water sources or water management areas (including part thereof) or to modify (including to amend the boundaries) or remove an existing water source or water management area (including part thereof) from this Plan,
- (b) add, remove or modify a management zone, including the water sources to which a management zone applies and the boundaries of such a zone,
- (c) add, remove or modify an extraction management unit, including the water sources to which an extraction management unit applies, or
- (d) amend the Plan Map.

### 72 (Repealed)

### 73 Part 6

- (1) Following the surrender under section 77 of the Act of an access licence and then the cancellation under section 77A (6) of the Act of an access licence in one of these water sources, the Minister may amend clause 28 to vary the long-term average annual extraction limit that applies to these water sources.
- (2) (Repealed)
- (3) Clause 38 may be amended to specify that reductions to available water determinations for unregulated river (special additional high flow) access licences may be made prior to, or at a rate greater than, reductions for unregulated river access licences.

- (4) Division 1 of Part 6 may be amended to establish two long-term extraction limits having regard to:
- (a) the requirements of Division 2 of Part 4 of Chapter 6 of the Basin Plan, and
  - (b) the accounting of water being used for environmental purposes that is not licensed environmental water.

## 74 Part 8

Division 2 of Part 8 of this Plan may be amended to do any of the following:

- (a) establish new or additional flow classes in any water source where management zones are added or in any water source or management zone that is amended during the term of this Plan, as specified in clause 71, provided that the Minister is satisfied that the amendment will not have significant adverse impact on the access to water of licence holders in that affected water source or management zone,
- (b) amend clause 46:
  - (i) in relation to the exclusion of aquifer interference approvals,
  - (ii) to specify alternate access rules for lagoons, lakes, in-river pools and other lentic water bodies,
  - (iii) after Year 3 of this Plan, to specify an alternate access rule based on visible flow at the location of one or more remote cameras for water taken under an access licence that nominates a water supply work in the Castlereagh River Binnaway to Gilgandra Management Zone of the Binnaway to Gilgandra Water Source or the Castlereagh River Gilgandra to Coonamble Water Source, or
  - (iv) to extend the exemption to the cease to take conditions for stock watering purposes specified in clause 46 (7) (c) beyond Year 5 of this Plan and/or modify the volume of water permitted to be taken for stock watering purposes after Year 5 of this Plan,
- (c) establish or assign new TDELs in these water sources or management zones following the imposition of an adaptive environmental water condition on an access licence that requires the water to be left in the water source or management zone for environmental purposes,
- (d) establish or assign new TDELs in these water sources or management zones, to protect a proportion of the flow within each flow class for the environment,
- (e) amend or remove TDELs if TDELs have been established or assigned,
- (f) include rules for the establishment, assignment and removal of IDELs,

- (g) remove the existing access rules where TDELs and/or IDELs have been established under paragraphs (c), (d) or (f) to protect a proportion of the flow within each flow class for the environment, or
- (h) reinstate access rules that applied at the commencement of this Plan, where TDELs and IDELs have been removed under paragraphs (e) and (f).

## **75 Part 9**

Part 9 may be amended to do any of the following:

- (a) amend clause 50 to specify water sources or management zones where water supply work approvals must not be granted or amended to authorise an in-river dam on third order or higher streams.
- (b) (Repealed)
- (c) (Repealed)
- (d) (Repealed)

## **75A Part 10**

Part 10 may be amended to provide for the conversion of regulated river (high security) access licences that specify regulated river water sources connected to, and downstream of, these water sources to access licences with share components that specify these water sources.

## **76 Part 11**

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

- (a) amend the rules in relation to record keeping including amendments in relation to requirements for Logbooks, or
- (b) amend clause 68 to specify different standards or requirements for decommissioning water supply works or construction requirements for water supply works.

## **77 Schedules**

- (1) Schedule 1 may be amended to add, modify or remove a definition.
- (1A) Schedule 1A may be deleted if the Minister is satisfied that it is no longer required.
- (2) Schedule 2 may be amended to do any of the following:
  - (a) add a new access licence to clause 1 of Schedule 2, provided that a written request has been made to the Minister and the Minister is satisfied that extraction under the access licence is for a purpose listed in clause 46 (7) (a) and that purpose was

specified on or referred to in the conditions of the former *Water Act 1912* entitlement that was replaced by the access licence or referred to in its conditions,

- (b) add a local water utility access licence or an access licence of the subcategory “Town water supply” to clause 2 of Schedule 2, provided the Minister is satisfied that the water supply system used to take, store and deliver water has not undergone major augmentation since the commencement of this Plan,
  - (c) remove a local water utility access licence or an access licence of the subcategory “Town water supply” or entitlement from Schedule 2 if:
    - (i) an access licence dealing results in water being taken under the licence from a different location,
    - (ii) an alternative water supply is obtained, or
    - (iii) the licence is surrendered or cancelled or its purpose ceases to exist, or
  - (d) remove a local water utility or an unregulated river (subcategory “town water supply”) access licence or former *Water Act 1912* entitlement from clause 2 of Schedule 2 if the Minister is satisfied that the water supply system used to take, store and deliver water has undergone major augmentation since the commencement of this Plan:
    - (i) the Minister is satisfied that the water supply system used to take, store and deliver water has undergone major augmentation since the commencement of this Plan, or
    - (ii) the access licence is surrendered or cancelled or the purpose ceases to exist.
- (3) Schedule 2 may be deleted if the Minister is satisfied that it is no longer required.
- (3A) Schedule 2A may be amended to do any of the following:
- (a) add a new access licence to clause 1 of Schedule 2A, provided that a written request has been made to the Minister and the Minister is satisfied that extraction under the access licence is for a purpose listed in clause 46B (5) and that purpose was specified on or referred to in the conditions of the former *Water Act 1912* entitlement that was replaced by the access licence or referred to in its conditions,
  - (b) add a local water utility access licence or an access licence of the subcategory “Town water supply” to clause 2 of Schedule 2A, provided the Minister is satisfied that the water supply system used to take, store and deliver water has not undergone major augmentation since the commencement of this Plan,

- (c) remove a local water utility access licence or an access licence of the subcategory “Town water supply” from Schedule 2A if:
  - (i) an access licence dealing results in water being taken under the licence from a different location,
  - (ii) an alternative water supply is obtained, or
  - (iii) the licence is surrendered or cancelled or its purpose ceases to exist,
- (d) remove a local water utility or an unregulated river (subcategory “Town water supply”) access licence or former *Water Act 1912* entitlement from clause 2 of Schedule 2A if:
  - (i) the Minister is satisfied that the water supply system used to take, store and deliver water has undergone major augmentation since the commencement of this Plan, or
  - (ii) the access licence is surrendered or cancelled or the purpose ceases to exist.
- (3B) Schedule 2A or part thereof may be repealed, if the Minister is satisfied that it is no longer required.
- (4) Schedule 3 may be deleted if the Minister is satisfied that it is no longer required.
- (5) (Repealed)
- (6) (Repealed)
- (7) Schedule 6 may be amended to add or remove an office.

## 78 Other

- (1) This Plan may be amended to provide rules for the following:
  - (a) the management of floodplain harvesting within these water sources,
  - (b) the shepherding of water,  
**Note.** *Shepherding* is defined in the Dictionary.
  - (c) any new category of access licence established for the purpose of stormwater harvesting, provided that the amendments do not affect the long-term average annual extraction limit specified in this Plan,
  - (d) the interception of runoff from land before it reaches a stream by plantations or other means,
  - (e) (Repealed)
  - (f) (Repealed)
  - (g) the management of salt interception schemes.

- (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.
- (3A) This Plan may be amended to enable a water resource plan to be accredited under the *Water Act 2007* of the Commonwealth.
- (4) This Plan may be amended after Year 5 to provide rules for the protection of water dependent Aboriginal cultural assets, including:
  - (a) the identification of water dependent Aboriginal cultural assets in a schedule,
  - (b) amending the access rules to protect water dependent Aboriginal cultural assets,
  - (c) restricting the granting and amendment of water supply works to protect water dependent Aboriginal cultural assets, and/or
  - (d) amending trading rules to protect water dependent Aboriginal cultural assets.
- (5) This Plan may be amended to include or amend rules in relation to record-keeping. This includes amendments in relation to requirements for Logbooks following the installation of meters with telemetry.
- (6) Any amendment under subclause (4) 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 (4) the Minister should consult with relevant Government agencies and stakeholders.

## Schedule 1 Dictionary

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

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

**approved EP&A Act development** means:

- (a) a project approved under Part 3A of the *Environmental Planning and Assessment Act 1979* (whether before or after its repeal), or
- (b) State significant development authorised by a development consent under Part 4 of that Act, or
- (c) State significant infrastructure approved under Part 5.1 of that Act.

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

**carbon and nutrient pathways** are the connected networks of streams, riparian zones, floodplains and wetlands that transport dissolved and suspended organic material and nutrients. Pathways can move material into and out of streams to support ecosystems throughout the water source. The MER Plan in Appendix 4 details the target ecosystems, monitoring performance indicators and monitoring locations in these water sources.

**cease to take condition** means any term or condition on a water supply work approval, access licence or *Water Act 1912* entitlement that prohibits the taking of water in a particular circumstance.

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

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

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

**full capacity** means the maximum volume of water that is impounded in the pool, lagoon or lake when the pool, lagoon or lake is at the level when a visible flow out of that pool, lagoon or lake would cease.

**grazeable area** means, for an individual landholding, the area of pasture in hectares for a pasture type that is accessible for stock grazing and able to grow appropriate vegetation for stock grazing, but does not include impervious surfaces (such as rocks or rocky terrain, man-made structures, mines or quarries) or other such surfaces that do not support grazing vegetation, such as water bodies and forested floors with no undergrowth.

**individual daily extraction limit (IDEL)** is the volume of water that may be extracted by an individual access licence from an unregulated river on a daily basis from a particular flow class.

**infrastructure** includes:

- (a) flow gauging devices or any other device that is used to measure the height of a river relative to a known datum point, from which the flow in the river can be calculated, or
- (b) a flow announcement system which is the mechanism by which the Minister communicates daily flow classes to the holders of an access licence within these water sources.

**in-river dam** means a dam located in a river.

**in-river dam pool** means the area of water immediately upstream of an in-river dam where the river has pooled as a result of an in-river dam.

**in-river pool** means a natural pool, lagoon or lake that is within a river or stream (regardless of stream size) and excludes:

- (a) a pool that is on a flood-runner or floodplain, or
- (b) a pool that is on an effluent that only commences to flow during high flows.

**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.

**low flow macroinvertebrate communities** are groups of macroinvertebrate species that are susceptible to being adversely affected by increases in the frequency and duration of low flows and drying

**low risk water sources** have been identified as having a low likelihood of extraction pressure and/or a low ecological consequence due to extraction pressure. Low risk water sources in this Plan have been identified in the *Risk Assessment for the Macquarie-Castlereagh water resource plan area (SW11): Part 1*

**management zone** is an area within a water source in which rules particular to that management zone will apply, for example daily extraction limits and restrictions on dealings.

**off-river pool** means a natural pool, lagoon or lake that is:

- (a) not within a river or stream (regardless of stream size),
- (b) located on a flood-runner or floodplain, or
- (c) located on an effluent that only commences to flow during high flows.

**runoff harvesting dam** means a dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are defined in harvestable rights orders made under section 54 of the Act. For the purposes of this Plan, references to runoff harvesting dams as water supply works include any associated pumps or other works which take water from the dam. For the purpose of clarity, this definition includes dams that are also used to store water diverted into the dam from a river or other source of water.

**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.

**slotted intervals** means that part of the water bore where slots in the casing occur which are designed to allow water to enter the bore.

**stream order** means the stream order defined by the Strahler stream ordering method.

**Note.** The Strahler stream ordering method is as described in the Order made under section 5 of the *Water Act 1912* published in the NSW Government Gazette No 37 on 24 March 2006 page 1500 or as may be amended or updated from time to time by further order.

**total daily extraction limit (TDEL)** is the volume of water that may be extracted under access licences from an unregulated river on a daily basis from a particular flow class.

**visible flow** means the continuous downstream movement of water that is perceptible to the eye.

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

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

**Year 3 of this Plan** means from the date of 1 July 2013 to 30 June 2014.

**Year 5 of this Plan** means from the date of 1 July 2015 to 30 June 2016.

### Schedule 1A Access licences subject to the cease to take condition specified in clause 46 (5) of this Plan

The access licences listed in Column A of the table below, which have share components that specify the water sources listed in Column B of the table below, will have the access rule condition specified in Column C imposed as mandatory conditions to give effect to clause 46 (5).

Column A Access licence	Column B Water source	Column C Access rules
31151	Castlereagh below Coonamble Water Source	Water must not be taken when the flow of water in the Castlereagh River at the Carinda-Walgett Road bridge is 2.43 metres or more below the decking of said bridge, unless: <ul style="list-style-type: none"> <li>(a) the level of the flow of water in the Castlereagh River at the Carinda-Walgett Road bridge is equal to or greater than 200 megalitres per day, and</li> <li>(b) application has been made and approval to take water obtained from the Department's Dubbo office.</li> </ul>
31149	Castlereagh below Coonamble Water Source	Water must not be taken when the flow of water in the Castlereagh River at the Carinda-Walgett Road bridge is 2.43 metres or more below the decking of said bridge, unless: <ul style="list-style-type: none"> <li>(a) the level of the flow of water in the Castlereagh River at the Carinda-Walgett Road bridge is equal to or greater than 200 megalitres per day, and</li> <li>(b) application has been made and approval to take water obtained from the Department's Dubbo office.</li> </ul>
27356	Nedgera Creek Water Source	Water must not be taken unless a flow is present in Garrawilla Watercourse equivalent to a depth of 75 millimetres over the concrete causeway on the Merri Merri Road, located within Portion 31, Parish of Yarrayin, County of Leichhardt.

## **Schedule 2 Access licences used to take surface water exempt from cease to pump rules**

### **1 General**

At the commencement of this Plan, no access licences which replace a *Water Act 1912* entitlement have been identified in clause 1 of this Schedule.

### **2 Local water utility and access licences of the subcategory “Town water supply”**

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

<b><i>Water Act 1912</i> entitlements that will be replaced by local water utility access licences or access licences of the subcategory “Town water supply” on commencement of this Plan</b>
80SL015684
80SL017505
80SL042534
80SL024215
80SL034604
80SL095376

**Schedule 2A Access licences used to take surface water exempt from cease to pump rules in the Castlereagh River above Binnaway Water Source**

**Note.** As at [insert date of plan amendment] no access licences were included within this Schedule, however Part 12 of this Plan allows for an amendment to be made to the Schedule to add access licences as appropriate.

**1 General**

This clause applies to each access licence listed in the table below.

<b>Access licences</b>

**2 Local water utility access licences and access licences of the subcategory “Town water supply”**

This clause applies to each access licence listed in the table below.

<b>Local water utility access licences or access licences of the subcategory “Town water supply”</b>

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**Schedule 3 Access rule for licences subject to clause 46 (4)**

The access licences listed in Column A of the table below, which have share components that specify the water sources listed in Column B of the table below, will have the access rule condition specified in Column C imposed as mandatory conditions to give effect to clause 46 (4).

<b>Column A Access licence</b>	<b>Column B Water source</b>	<b>Column C Access rules</b>
27265	Castlereagh below Coonamble Water Source	If the rate of extraction is greater than 10 megalitres on any calendar day, water must not be taken on the following calendar day.

**Schedule 4 (Repealed)**

**Schedule 5 (Repealed)**

## **Schedule 6 Office**

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

Department of Industry, Water  
209 Cobra St  
DUBBO NSW 2830

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## Appendix 1 Overview of Plan Map

Overview of the *Plan Map (WSP012 Version 3), Water Sharing Plan for the Castlereagh River Unregulated Water Sources 2011.*

**<Map to be inserted before pub ex>**

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## **Appendix 2    Inspection of Plan Map**

Copies of the Plan Map may be inspected at the following offices:

Department of Industry, Water  
10 Valentine Ave  
PARRAMATTA NSW 2150

Department of Industry, Water  
56 Cassilis Street  
COONABARABRAN NSW 2357

Department of Industry, Water  
209 Cobra St  
DUBBO NSW 2830

## **Appendix 3    (Repealed)**

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**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
<b>Environmental</b>					
<p>Clause 10 (2) (a) 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 10 (3) (a) - (e)</p>	<p>Clause 10 (5) (a) (i) and (v), (b) and (c)</p>	<p>Priority locations for targeted monitoring within these water sources are locations that include the following conditions:</p> <ol style="list-style-type: none"> <li>1. One or more recorded or predicted populations of:                             <ol style="list-style-type: none"> <li>a. Murray cod</li> <li>b. Eel-tailed catfish</li> <li>c. Southern purple-spotted gudgeon</li> <li>d. Olive perchlet</li> <li>e. Silver perch</li> <li>f. Flathead galaxias</li> <li>g. Golden perch</li> <li>h. High fish diversity locations</li> <li>i. River red gum woodland</li> <li>j. Carex sedgeland EEC</li> <li>k. Coolibah- Black box EEC</li> <li>l. Lowland Darling River AEEC</li> </ol> </li> <li>2. River sections that were identified as medium or high risk in the <i>Risk Assessment for the Macquarie-Castlereagh water resource plan area (SW11)</i></li> </ol>	<p><i>Risk assessment for the Macquarie-Castlereagh water resource plan area</i> Add Hyperlink - <i>Guidelines for setting and evaluating Plan objectives for water management</i> Add Hyperlink - <i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i> Add Hyperlink - <i>Macquarie Long-Term Water Plan</i> Add Hyperlink -</p>	<p>Similar objectives and monitoring targets can be found in other water sharing plans. Therefore, relevant monitoring data from those water sharing plan areas may be considered when evaluating this objective for these water sources.</p>
<p>Clause 10 (2) (b) Protect and, where possible, enhance the population structure of target ecological populations including</p>	<p>Clause 10 (3) (a) - (e)</p>	<p>Clause 10 (5) (a) (ii) and (v), (b) and (c)</p>	<p>Priorities for targeted monitoring within these water sources are locations that include the following conditions:</p> <ol style="list-style-type: none"> <li>1. One or more recorded or predicted occurrences of:                             <ol style="list-style-type: none"> <li>a. Murray cod</li> </ol> </li> </ol>	<p><i>Risk assessment for the Macquarie-Castlereagh water resource plan area</i> Add Hyperlink - <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 plans. Therefore, relevant monitoring data from those water sharing</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>native fish, native vegetation and low flow macroinvertebrate communities, over the term of this Plan</p>			<ul style="list-style-type: none"> <li>b. Eel-tailed catfish</li> <li>c. Southern purple-spotted gudgeon</li> <li>d. Olive perchlet</li> <li>e. Silver perch</li> <li>f. Flathead galaxias</li> <li>g. Golden perch</li> <li>a. High fish diversity locations</li> <li>b. River red gum woodland</li> <li>c. Coolibah-Black box woodland EEC</li> <li>d. Carex sedgeland EEC</li> </ul> <p>2. River sections that were identified as medium or high risk in the <i>Risk Assessment for the Macquarie-Castlereagh water resource plan area (SW11)</i></p>	<p><i>management</i></p> <p>Add Hyperlink -</p> <p><i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p> <p><i>Macquarie Long-Term Water Plan</i></p> <p>Add Hyperlink -</p>	<p>plan areas may be considered when evaluating this objective for these water sources.</p>
<p>Clause 10 (2) (c)</p> <p>Protect and, where possible, enhance the connectivity between these water sources to support downstream processes including priority carbon and nutrient pathways and priority fish passages, over the term of this Plan</p>	<p>Clause 10 (3) (a) - (e)</p>	<p>Clause 10 (5) (a) (i), (iii) and (v), (b) and (c)</p>	<p>Priorities for targeted monitoring within these water sources include the following conditions:</p> <ul style="list-style-type: none"> <li>1. One or more river sections that include: <ul style="list-style-type: none"> <li>a. Tributary catchments that can contribute unregulated carbon and nutrient loads into the regulated river or higher order water sources</li> <li>b. Low lying floodplains or benches that can be rich sources of carbon and nutrients</li> <li>c. Significant barriers to migratory fish movement</li> </ul> </li> <li>2. River sections and water sources that were identified as medium or high risk in the <i>Risk Assessment for the Macquarie-Castlereagh Water</i></li> </ul>	<p><i>Risk assessment for the Macquarie Macquarie-Castlereagh water resource plan area</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>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan n</i></p> <p>Add Hyperlink -</p> <p><i>Macquarie Long-Term Water Plan</i></p> <p>Add Hyperlink -</p>	<p>Similar objectives and monitoring targets can be found in other water sharing plans. Therefore, relevant monitoring data from those water sharing plan areas may be considered when evaluating this objective for these water sources.</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
			<i>Resource Plan area (SW11)</i>		
<p>Clause 10 (2) (d) Protect and, where possible, enhance water quality within these water sources to support water-dependent ecosystems and ecosystem functions, over the term of this Plan</p>	<p>Clause 10 (3) (a) - (e)</p>	<p>Clause 10 (5) (a) (iv) and (v), (b) and (c)</p>	<p>Priorities for targeted monitoring within these water sources are locations that include the following conditions:</p> <ol style="list-style-type: none"> <li>1. Representative river sections identified in the <i>NSW State Water Quality Assessment and Monitoring Program</i></li> <li>2. River sections that were identified as medium or high risk in the <i>Risk Assessment for the Macquarie-Castlereagh water resource plan area (SW11)</i></li> </ol>	<p><i>Risk assessment for the Macquarie-Castlereagh water resource plan area</i></p> <p>Add Hyperlink - <i>Water quality management plan for the Macquarie-Castlereagh water resource plan area (SW11)</i></p> <p>Add Hyperlink – <i>NSW Cold Water Pollution Strategy</i></p> <p>Add Hyperlink – <i>NSW Draft algal risk management sub plan</i></p> <p>Add Hyperlink – <i>Guidelines for setting and evaluating Plan objectives for water management</i></p> <p>Add Hyperlink - <i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and</i></p>	<p>Similar objectives and monitoring targets can be found in other water sharing plan and programs. Therefore, relevant monitoring data from those water sharing plan areas and programs may be considered when evaluating this objective for these water sources.</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
				<i>Reporting Plan</i> Add Hyperlink -	
<b>Economic</b>					
Clause 11 (2) (a)  Provide water trading opportunities for water-dependent economic activities	Clause 11 (3) (d)	Clause 11 (5) (a) and (b), Clause 11(6) (a) and (b)	Priority locations for targeted monitoring within these water sources are locations that include one or more of the following conditions:  1. High community dependency on surface water extraction (for agriculture, business, landholders) as evidenced by: 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 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  Economic diversity (measured using the	<i>Guidelines for setting and evaluating Plan objectives for water management</i>  Add Hyperlink -  <i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i>  Add Hyperlink -	Similar objectives and monitoring targets are found in other water sharing plan areas.  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

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
			Shannon-Weaver Index <sup>1</sup> ).		
Clause 11 (2) (b) Maintain access to water for agriculture, business and landholders	Clause 11 (3) (a) to (c)	Clause 11 (5) (a), Clause 11(6) (a) and (b)	<p>Priority locations for targeted monitoring within these water sources are locations that include one or more of the following conditions:</p> <ol style="list-style-type: none"> <li>1. High community dependency on surface water extraction (for agriculture, business, landholders) as evidenced by:               <ol style="list-style-type: none"> <li>a. the number of Water Access Licence (WAL): by WAL category</li> <li>b. water made available (ML) each year over the past 5 years by WAL licence category</li> <li>c. water usage (ML) each year over the last five years by WAL category</li> <li>d. gross value of irrigated production each year over the last five years</li> <li>e. gross value of dryland agriculture production each year over the last five years</li> <li>f. the number, total value and VWAP of allocation trades in- and out- of the region each year over the last five years</li> <li>g. the number, total value and VWAP of entitlement trades in- and out- of the region each year over the last five years</li> <li>h. town population</li> </ol> </li> </ol> <p>Economic diversity measured using the</p>	<p><i>Guidelines for setting and evaluating Plan objectives for water management</i></p> <p>Add Hyperlink - <i>Macquarie-Castlereagh Surface 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>

<sup>1</sup> <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](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
			Shannon-Weaver Index <sup>2</sup>		
Clause 11 (2) (c) Contribute to maintaining water quality for agriculture, business and landholders	Clause 11 (3) (a) to (c)	Clause 11 (5) (a) and (c), Clause 11(6) (a) and (b)	<p>Priorities for targeted monitoring within these water sources are locations that include the following conditions:</p> <p>1. Representative river sections identified in the <i>NSW State Water Quality Assessment and Monitoring Program</i></p> <p>River sections that were identified as medium or high risk in the <i>Risk Assessment for the Macquarie-Castlereagh Water Resource Plan area</i></p>	<p><i>Risk assessment for the Macquarie-Castlereagh water resource plan area</i></p> <p>Add Hyperlink -</p> <p><i>Water quality management plan for the Macquarie-Castlereagh water resource plan area</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 management</i></p> <p>Add Hyperlink -</p> <p><i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</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 these water sources.
<b>Aboriginal cultural</b>					
Clause 12 (2) (a) Maintain or improve access to water for	Clause 12 (3) (a)	Clause 12 (5) (a) - (f)	<p>Priorities for targeted monitoring within these water sources are locations that include the following conditions:</p>	<i>Guidelines for setting and evaluating Plan objectives for water management</i>	

<sup>2</sup> <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](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
holders of native title			1. the number of Water Access Licence (WAL): by WAL category <sup>3</sup>  population / groups holding native title with respect to water, as determined under the Native Title Act 1993 (Cwlth) <sup>4</sup>	Add Hyperlink -  <i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i>  Add Hyperlink -	
Clause 12 (2) (b)  Maintain or improve access to water for Aboriginal cultural use, including fishing	Clause 12 (3) (b) - (e)	Clause 12 (5) (a), (b), (d) - (f)	Priorities for targeted monitoring within these water sources are locations that include the following conditions:  1. the number of Water Access Licence (WAL): by WAL category <sup>5</sup> 2. population / groups holding native title with respect to water, as determined under the Native Title Act 1993 (Cwlth) <sup>6</sup>  Culturally important fishing locations and species identified	<i>Guidelines for setting and evaluating Plan objectives for water management</i>  Add Hyperlink -  <i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i>  Add Hyperlink -	
Clause 12 (2) (c)  Protect identified water-dependent cultural areas, including culturally	Clause 12 (3) (b) - (e)	Clause 12 (5) (a), (c) - (f)	Priorities for targeted monitoring within these water sources are locations that include the following conditions:  1. the number of Water Access Licence (WAL): by WAL category <sup>7</sup>	<i>Guidelines for setting and evaluating Plan objectives for water management</i>  Add Hyperlink -	

<sup>3</sup> Aboriginal Cultural Water Access Licence/Aboriginal Community Development Water Access Licences

<sup>4</sup> 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.

<sup>5</sup> Aboriginal Cultural Water Access Licence/Aboriginal Community Development Water Access Licences.

<sup>6</sup> 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.

<sup>7</sup> Aboriginal Cultural Water Access Licence/Aboriginal Community Development Water Access Licences.

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
important riparian vegetation communities.			2. population / groups holding native title with respect to water, as determined under the Native Title Act 1993 (Cwlth) <sup>8</sup>  identified cultural assets including vegetation communities and regions	<i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i>  Add Hyperlink -	
Clause 12 (2) (d) Maintain or enhance water quality to ensure suitability of water for Aboriginal cultural use	Clause 12 (3) (c) - (e)	Clause 12 (5) (a) - (f)	Priorities for targeted monitoring within these water sources are locations that include the following conditions:  1. the number of Water Access Licence (WAL): by WAL category <sup>9</sup> 2. population / groups holding native title with respect to water, as determined under the Native Title Act 1993 (Cwlth) <sup>10</sup>  identified cultural assets	<i>Water quality management plan for the Macquarie-Castlereagh water resource plan area</i>  Add Hyperlink – <i>Guidelines for setting and evaluating Plan objectives for water management</i>  Add Hyperlink - <i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i>  Add Hyperlink -	
<b>Social and cultural</b>					
Clause 12A (2) (a) Maintain or improve	Clause 12A (3) (a) to (d)	Clause 12A (5) (a) - (c)	Priorities for targeted monitoring within this water source are locations that include	<i>Guidelines for setting and evaluating Plan objectives for water</i>	Similar objectives and monitoring targets are found in other water

<sup>8</sup> 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.

<sup>9</sup> Aboriginal Cultural Water Access Licence/Aboriginal Community Development Water Access Licences.

<sup>10</sup> 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
access to water for basic human needs, town water supply and domestic and stock purposes		and (e)	<p>the following conditions:</p> <p>(1) High community dependency on water extraction (for basic human needs, town water supply and domestic and stock purposes) as evidenced by:</p> <p>a. the number of Water Access Licence (WAL): by WAL category<sup>11</sup></p> <p>b. water made available (ML) each year over the past 5 years by WAL licence category<sup>12</sup></p> <p>c. Water usage (ML) each year over the last five years by WAL category<sup>13</sup></p> <p>d. Town population</p> <p>Turbidity (NTU), colour (HU) and E.coli and chemicals less than Australian Drinking Water Guidelines and utility service level limit at offtake.</p>	<p><i>management</i></p> <p>Add Hyperlink - <i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i></p> <p>Add Hyperlink -</p>	<p>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>
Clause 12A (2) (b) Maintain or improve access to water for water-dependent cultural, heritage and recreational uses, including recreational fishing	Clause 12A (3) (a) to (d)	Clause 12A (5) (a) - (c) and (e)	<p>Priority locations for targeted monitoring within this water source are locations that include the following conditions:</p> <p>(1) One or more recorded or predicted occurrences of:</p> <p>a. Murray cod</p> <p>b. Eel-tailed catfish</p>	<p><i>Guidelines for setting and evaluating Plan objectives for water management</i></p> <p>Add Hyperlink - <i>Macquarie-Castlereagh Surface Water Monitoring, Evaluation and Reporting Plan</i></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</p>

<sup>11</sup> 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)

<sup>12</sup> WAL categories as above

<sup>13</sup> 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"> <li>c. Purple-spotted gudgeon</li> <li>d. Olive perchlet</li> <li>e. Silver perch</li> <li>f. Golden perch</li> <li>g. High fish diversity locations</li> </ul> <p>(2) Recorded takes of native fish that are important for recreational fishing within legal age and size classes as described in Appendix 4</p> <p>(3) 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>(4) Number of recreational water sites with Red blue-green algae in past 3 years</p> <p>(5) Recreational water sites with Amber blue-green algae in past 3 years</p>	<p>Add Hyperlink -</p>	<p>particularly well in situations where people or the economy are highly dependent on water extraction</p>
<p>Clause 12A (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 12A (3) (a) to (d)</p>	<p>Clause 12A (5) (a), (d) and (e)</p>	<p>Priorities for targeted monitoring within these water sources are locations that include the following conditions:</p> <ol style="list-style-type: none"> <li>1. Representative river sections identified in the <i>NSW State Water Quality Assessment and Monitoring Program</i></li> </ol> <p>River sections that were identified as medium or high risk in the <i>Risk Assessment for the Macquarie-Castlereagh Water Resource Plan area (SW11)</i></p>	<p><i>Risk assessment for the Macquarie-Castlereagh water resource plan area</i></p> <p>Add Hyperlink -</p> <p><i>Water quality management plan for the Macquarie-Castlereagh water resource plan area</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 these water sources.</p>

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

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