

New South Wales

Water Sharing Plan for the Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sources 2011

under the

Water Management Act 2000

I, the Minister for Water, in pursuance of section 50 of the *Water Management Act 2000,* do, by this Order, make the following Minister's Plan for the Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sources.

Dated this 28th day of February, 2011.

PHILLIP COSTA

Minister for Water

Explanatory note

Section 50 (1) of the *Water Management Act 2000* provides that the Minister may, by order published on the NSW legislation website, make a Minister's plan:

- (a) for any part of the State that is not within a water management area, or
- (b) for any water management area or water source, or part of a water management area or water source, for which a management plan is not in force, or
- (c) for any water management area or water source, or part of a water management area or water source, for which a management plan is in force, but only so as to deal with matters not dealt with by the management plan.

The purpose of this Order is to make the Water Sharing Plan for the Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sources 2011.

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Water Sharing Plan for the Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sources 2011

Part 1 Introduction

Note. Part 13 allows for amendments to be made to Part 1.

1 Name of this Plan

This Plan is the Water Sharing Plan for the Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial 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 April 2011.

Notes.

- 1 In accordance with section 43 of the Act, this Plan will have effect for 10 years from 1 July 2011.
- 2 The Minister may extend this Plan for a further period of 10 years after the plan is due to expire, in accordance with section 43A of the Act.

4 Application of this Plan

- This Plan applies to the following water sources (hereafter *these water sources*) within the South East Water Management Area:
 - (a) Bega and Brogo Regulated Rivers Water Source;

- (b) Mid Bega River Tributaries Water Source;
- (c) Mid Bega River Sands Water Source;
- (d) Upper Bega / Bemboka Rivers Water Source;

Note. This water source includes the main stem of the Upper Bega and Bemboka Rivers, and adjacent alluvials, the Cochrane Dam water storage downstream to the junction of the Bega River with Wolumla Creek.

- (e) Upper Bega / Bemboka Rivers Tributaries Water Source;
- (f) Candelo Creek Water Source;
- (g) Sandy Creek Water Source;
- (h) Tantawangalo Creek Water Source;
- (i) Lower Bega / Lower Brogo Rivers Tributaries Water Source;
- (j) Upper Brogo River Water Source;
- (k) Wolumla Creek Water Source; and
- (1) Bega River Estuary and Tributaries Water Source.

Note. The South East 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 registered map called The Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sources held by the NSW Office of Water, hereafter the *Registered Map*.

Note. An overview of the Registered Map is shown in Appendix 1. Copies of the Registered Map may be inspected at the offices listed in Appendix 2.

- (3) Subject to subclause (5), the Bega and Brogo Regulated Rivers Water Source includes all water:
 - (a) occurring between the banks of the Brogo River, from Brogo Dam downstream to its junction with the Bega River, which has been declared by the Minister to be a regulated river;

- (b) occurring between the banks of the Bega River from 500 metres upstream of its junction with the Brogo River, downstream to its junction with the Jellat Jellat Creek, which has been declared by the Minister to be a regulated river;
- (c) occurring between the banks of Coopers Creek from its junction with the Brogo River to the upper limit of the lagoon section within portion 97, Parish of Bega, which has been declared by the Minister to be a regulated river; and
- (d) contained in the unconsolidated alluvial sediments underlying and adjacent to the rivers referred to in paragraphs (a), (b) and (c) as shown on the Registered Map.

Note. For the purposes of the Act, a regulated river means a river that is declared by the Minister to be a regulated river, by Order published in the New South Wales Government Gazette.

- (4) Subject to subclause (5), these water sources, excluding the Bega and Brogo Regulated Rivers Water Source, include all water:
 - (a) occurring naturally on the surface of the ground shown on the Registered Map;
 - (b) in rivers, lakes, estuaries and wetlands in these water sources; and
 - (c) contained within all alluvial sediments below the surface of the ground shown on the Registered Map (hereafter *these alluvial sediments*).
- (5) These water sources do not include water contained in:
 - (a) the coastal sands; and
 - (b) any fractured rocks or porous rocks.

5 Management Zones

- (1) For the purposes of this Plan, the following water sources are divided into the following management zones:
 - (a) Bega River Estuary and Tributaries Water Source:
 - (i) Upper Estuary Management Zone; and

- (ii) Lower Estuary Management Zone; and
- (b) Tantawangalo Creek Water Source:
 - (i) Upper Tantawangalo Creek Management Zone; and
 - (ii) Lower Tantawangalo Creek Management Zone.
- (2) The management zones in subclause (1) are shown on the Registered Map.

6 Extraction management units in these water sources

- (1) This Plan establishes the following extraction management units (hereafter *the EMUs*):
 - (a) Bega River Catchment Extraction Management Unit which applies to the water sources specified in item (a) of Column 2 of Table A; and
 - (b) Bega and Brogo Regulated Rivers Extraction Management Unit which applies to the water sources specified in item (b) of Column 2 of Table A.
- (2) The EMUs are shown on the Registered Map.

Notes.

- 1 A long-term average annual extraction limit is established in Part 7 of this Plan for each extraction management unit. The long-term average annual extraction limit determines the maximum volume of water that may be extracted under access licences from all water sources within the extraction management unit on a long-term average annual basis.
- 2 The EMUs, and any water source to which the EMUs apply, may be amended as provided for in Part 13 of this Plan.

	Column 1 – Extraction Management Unit	Column 2 – Water Sources
(a)	Bega River Catchment Extraction Management Unit	Mid Bega River Tributaries Water Source
		Mid Bega River Sands Water Source
		Upper Bega / Bemboka Rivers Water Source
		Upper Bega / Bemboka Rivers Tributaries Water Source
		Candelo Creek Water Source
		Sandy Creek Water Source
		Tantawangalo Creek Water Source
		Lower Bega / Lower Brogo Rivers Tributaries Water Source
		Upper Brogo River Water Source
		Wolumla Creek Water Source
		Bega River Estuary and Tributaries Water Source
(b)	Bega and Brogo Regulated Rivers	Bega and Brogo Regulated Rivers Water
	Extraction Management Unit	Source

Table A – Extraction Management Units

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 12 of this Plan.

Note. The rules in this Plan include environmental water rules, system operation rules, access

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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 of 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 Water Management (General) Regulation 2004 (hereafter the Regulation) 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.
- (5) Notes in the text of this Plan do not form part of this Plan.
- (6) Appendices to this Plan do not form part of this Plan.

Part 2 Vision, objectives, strategies and performance indicators

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

9 Vision statement

The vision for this Plan is that these water sources and the water dependent ecosystems will be protected and enhanced, whilst the social, cultural and economic future of the catchment community is recognised and fostered.

10 Objectives

- (1) The objectives of this Plan for these water sources are to:
 - (a) manage the water sources of the Bega Valley that are covered by this Plan in a way that recognises the interaction between the regulated river and unregulated river water sources and their alluvial groundwater;
 - (b) protect, preserve, maintain and enhance the important river flow dependent and high priority groundwater dependent ecosystems of these water sources;
 - (c) protect, preserve, maintain and enhance the Aboriginal, cultural and heritage values of these water sources;
 - (d) protect basic landholder rights;
 - (e) manage these water sources to ensure equitable sharing between users;
 - (f) provide opportunities for market based trading of access licences and water allocations within sustainability and system constraints;
 - (g) provide water allocation account management rules which allow sufficient flexibility to encourage responsible use of available water;
 - (h) contribute to the maintenance of water quality;
 - (i) provide recognition of the connectivity between surface water and groundwater;
 - (j) adaptively manage these water sources;

- (k) contribute to the maintenance of estuarine processes and habitats;
- maintain a contribution of flows from upstream water sources to downstream water sources; and
- (m) contribute to the "environmental and other public benefit outcomes" identified under the "Water Access Entitlements and Planning Framework" in the Intergovernmental Agreement on a National Water Initiative (2004) (NWI).

Note. Under the NWI, water that is provided by NSW "to meet agreed *environmental* and other public benefit outcomes as defined within relevant *water plans* is to:

- (i) be given statutory recognition and have at least the same degree of security as water access entitlements for *consumptive use* and be fully accounted for;
- be defined as the water management arrangements required to meet the outcomes sought, including water provided on a rules basis or held as a water access entitlement; and
- (iii) if held as a water access entitlement, may be made available to be traded (where physically possible) on the temporary market, when not required to meet the *environmental and other public benefit outcomes* sought and provided such trading is not in conflict with these outcomes."
- (2) In addition to subclause (1), the objectives of this Plan for the Bega and Brogo Regulated Rivers Water Source are to:
 - (a) protect the natural seasonal variation of low flows during dry periods;
 - (b) mitigate the impacts of instream structures;
 - (c) maintain a highly reliable supply of water to towns;
 - (d) provide clarity of rights for holders of regulated river (high security) access licences and regulated river (general security) access licences; and
 - (e) provide clarity of access to uncontrolled flows and for supplementary water access licences.
- (3) In addition to subclause (1), the objectives of this Plan for these water sources, excluding the Bega and Brogo Regulated Rivers Water Source, are to:
 - (a) preserve and maintain the natural functions of pools particularly during dry

periods, which includes the natural rates of drying;

- (b) preserve and maintain the functions of very low flows; and
- (c) allow for water trading to help shift reliance on extraction from low flows towards greater reliance on extraction from high flows.

11 Strategies

The strategies of this Plan are to:

- (a) establish environmental water rules;
- (b) identify water requirements for basic landholder rights;
- (c) identify water requirements for access licences;
- (d) establish rules for granting of access licences and approvals;
- (e) establish rules that place limits on the availability of water for extraction;
- (f) establish rules for making available water determinations;
- (g) establish rules for the operation of water accounts;
- (h) establish rules which specify the circumstances under which water may be extracted;
- (i) establish access licence dealing rules;
- (j) establish performance indicators;
- (k) identify triggers for and limits to changes to the rules in this Plan;
- establish rules for the location of new bores to protect groundwater dependant ecosystems;
- (m) provide for the issuing of subcategory "Aboriginal cultural" access licences and "Aboriginal community development" access licences;

- (n) provide for the conversion of unregulated river access licences to unregulated
 (high flow) access licences to reduce pressure on low flows and improve river health;
- (o) establish access licence dealing rules to provide flexibility for users without adversely impacting on water sources;
- (p) protect water for critical human needs through the Cochrane Dam Drought Reserve;
- (q) establish rules for the operations of Brogo Dam and the Bega and Brogo Regulated Rivers Water Source; and
- (r) ensure that the impact of reduced water availability in the regulated river is shared between regulated river (high security) access licences and regulated river (general security) access licences.

Note. These strategies provide a framework for the development of future water supplies recognising the requirements of the environment and other water users.

12 Performance indicators

The following indicators are to be used to measure the success of the strategies to reach the objectives of the Plan:

- (a) change in low flow regime;
- (b) change in moderate to high flow regime;
- (c) change in groundwater extraction relative to the long-term average annual extraction limit;
- (d) change in local water utility access;
- (e) change in, or maintenance of the ecological value and condition of these water sources and dependent ecosystems, including the Bega Estuary;
- (f) the extent to which basic landholder rights requirements have been met;
- (g) the extent to which local water utility requirements have been met;

- (h) the extent to which native title rights requirements have been met;
- (i) the change in economic benefits derived from water extraction and use;
- (j) the extent of recognition of spiritual, social and customary values of water to Aboriginal people; and
- (k) improvement of water quality to support environmental values of these water sources.

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 Division 1 of 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 11 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 7 of this Plan;
 - (b) establishes rules according to which access licences are to be granted and managed contained in Parts 8 and 9 of this Plan, and available water determinations to be made contained in Division 2 of Part 7 of this Plan;
 - (c) recognises the effect of climatic variability on the availability of water as described in clause 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 7 of this Plan;
 - (e) contains provisions with respect to the conditions that must be imposed as mandatory conditions on access licences, contained in Division 1 of Part 12 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 and groundwater levels in these water sources by having provisions that:

- (a) manage the sharing of water in these water sources within the limits of water availability on a long-term average annual basis and the priorities according to which water allocations are to be adjusted as a consequence of any reductions in the availability of water due to an increase in average annual extraction against the long-term average annual extraction limit, contained in Division 1 of Part 7 of this Plan;
- (b) manage the sharing of water in specified water sources on a daily basis in these water sources, excluding the Bega and Brogo Regulated Rivers Water Source, contained in Division 3 of Part 9 of this Plan; and
- (c) manage the allocation of water to access licence holders in the Bega and Brogo Regulated Rivers Water Source within the limits of water availability in any water year, according to the rules contained in Division 2 of Part 7.

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.

Part 4 Environmental water provisions

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

Division 1 Planned environmental water

15 General

This Division 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

- (1) Planned environmental water is committed and identified in these water sources as set out in this clause.
- (2) 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; and
 - (b) 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) Planned environmental water is established and maintained in these water sources as set out in this clause.
- (2) Planned environmental water in these water sources is established as follows:

- (a) it is the physical presence of water:
 - (i) in the Bega and Brogo Regulated Rivers Water Source that results from the environmental release rules from Brogo Dam as specified in clause 33, the limitations on access to uncontrolled flows for regulated river (general security) access licences as specified in clause 61 and the limitations on access to supplementary flows for supplementary water access licences as specified in clause 62;
 - (ii) in these water sources, excluding the Bega and Brogo Regulated Rivers Water Source, that results from the environmental release rules from Cochrane Dam specified in clause 32 and the access rules specified in Division 3 of Part 9 of this Plan;

Notes.

- 1 The rules in clause 32 and clause 33 respectively, set water aside in Cochrane Dam and Brogo Dam, for the purpose of making releases later in the water year for environmental purposes. The rules in clauses 61 (4) and 62 (2) (g) respectively protect 50% of uncontrolled flow event volumes and supplementary flow event volumes for the environment.
- 2 The rules in Division 3 of Part 9 of this Plan set flow rates or flow levels below which the taking of water is not permitted. Some limited exemptions apply.
- (b) it is the water remaining after water has been taken pursuant to basic landholder rights and access licences in accordance with the rules specified in Part 7 and Part 9 of this Plan.
- (3) The planned environmental water established under subclause (2) (a) is maintained in:
 - (a) the Bega and Brogo Regulated Rivers Water Source by the environmental release rules from Brogo Dam as specified in clause 33, the limitations on access to uncontrolled flows for regulated river (general security) access licences as specified in clause 61 and the limitations on access to supplementary flows for supplementary water access licences as specified in clause 62;
 - (b) these water sources, excluding the Bega and Brogo Regulated Water Source, by the environmental release rules from Cochrane Dam as specified in clause 32 and the rules specified in Division 3 of Part 9 of this Plan.

(4) The planned environmental water established in subclause (2) (b) is maintained by the rules specified in Part 7 and Divisions 2 3 of Part 9 of this Plan.

Note. Part 7 of this Plan ensures compliance with the long-term average annual extraction limit by providing for the reduction in available water determinations when the long-term average annual extraction limit has been exceeded in any water year.

Division 2 Adaptive environmental water

18 Adaptive environmental water provisions

- (1) A holder of an access licence in these water sources may request that the Minister impose an adaptive environmental water condition in respect of the whole or a part of the access licence, in accordance with section 8B of the Act.
- (2) An access licence may be granted in these water sources in accordance with section 8C of the Act.
- (3) An access licence surrendered by its holder may be kept by the Minister, or transferred, or changed to a different category or subcategory, in accordance with section 8D of the Act.

Part 5 Requirements for water

Division 1 General

19 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 7 of this Plan.

Note. The total share components of access licences in these water sources may change during the terms 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

20 Domestic and stock rights

(1) At the commencement of this Plan, the water requirements of persons entitled to domestic and stock rights in these water sources are estimated to total 1.3 megalitres

per day (hereafter *ML/day*), distributed as follows:

- (a) 0.1 ML/day in the Mid Bega River Tributaries Water Source;
- (b) 0.2 ML/day in the Mid Bega River Sands Water Source;
- (c) 0.2 ML/day in the Upper Bega / Bemboka Rivers Water Source;
- (d) 0.1 ML/day in the Upper Bega / Bemboka Rivers Tributaries Water Source;
- (e) 0.1 ML/day in the Candelo Creek Water Source;
- (f) 0.1 ML/day in the Sandy Creek Water Source;
- (g) 0.1 ML/day in the Tantawangalo Creek Water Source;
- (h) 0.1 ML/day in the Lower Bega / Lower Brogo Rivers Tributaries Water Source;
- (i) 0.1 ML/day in the Upper Brogo River Water Source;
- (j) 0.1 ML/day in the Wolumla Creek Water Source; and
- (k) 0.1 ML/day in the Bega River Estuary and Tributaries Water Source.
- (2) At the commencement of this Plan, the water requirements of persons entitled to domestic and stock rights in the Bega and Brogo Regulated Rivers Water Source are estimated to total 250 megalitres per year (hereafter *ML/year*).

Notes.

- 1 Domestic and stock rights are set out in 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.

21 Native title rights

At the commencement of this Plan, there are no native title rights in these water sources. Therefore the water requirements for native title rights total 0 ML/year.

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

22 Harvestable rights

- (1) The requirement for water under harvestable rights in these water sources is the total amount of water that owners or occupiers of landholdings are entitled to capture and store in these water sources, pursuant to a harvestable rights order made under Part 1 of Chapter 3 of the Act.
- (2) At the commencement of this Plan, the water requirements of holders of harvestable rights within these water sources are estimated to total 9,100 ML/year.

Division 3 Requirements for water for extraction under access licences

23 Share components of domestic and stock access licences

It is estimated that at the time of commencement of this Plan, the share components of domestic and stock access licences authorised to take water from these water sources will total 342.1 ML/year, distributed as follows:

- (a) 6 ML/year in the Mid Bega River Tributaries Water Source;
- (b) 46 ML/year in the Mid Bega River Sands Water Source;
- (c) 58.5 ML/year in the Upper Bega / Bemboka Rivers Water Source;
- (d) 8.5 ML/year in the Upper Bega / Bemboka Rivers Tributaries Water Source;
- (e) 49 ML/year in the Candelo Creek Water Source;
- (f) 5.5 ML/year in the Sandy Creek Water Source;
- (g) 25 ML/year in the Tantawangalo Creek Water Source;
- (h) 51.1 ML/year in the Lower Bega / Lower Brogo Rivers Tributaries Water Source;
- (i) 31.5 ML/year in the Wolumla Creek Water Source;

- (j) 15 ML/year in the Bega River Estuary and Tributaries Water Source;
- (k) 46 ML/year in the Bega and Brogo Regulated Rivers Water Source; and
- (1) 0 ML/year in all other water sources.

24 Share components of local water utility access licences

It is estimated that at the time of commencement of this Plan, the share components of local water utility access licences authorised to take water from these water sources will total 4,906 ML/year, distributed as follows:

- (a) 2,640 ML/year in the Mid Bega River Sands Water Source;
- (b) 66 ML/year in the Upper Bega / Bemboka Rivers Water Source;
- (c) 1,500 ML/year in the Tantawangalo Creek Water Source;
- (d) 700 ML/year in the Bega and Brogo Regulated Rivers Water Source; and
- (e) 0 ML/year in all other water sources.

25 Share components of unregulated river access licences

It is estimated that at the time of commencement of this Plan, the share components of unregulated river access licences authorised to take water from these water sources will total 24,975 unit shares, distributed as follows:

- (a) 52 unit shares in the Mid Bega River Tributaries Water Source;
- (b) 3,279 unit shares in the Mid Bega River Sands Water Source;
- (c) 9,370 unit shares in the Upper Bega / Bemboka Rivers Water Source;
- (d) 2,352 unit shares in the Upper Bega / Bemboka Rivers Tributaries Water Source;
- (e) 1,161 unit shares in the Candelo Creek Water Source;
- (f) 1,347 unit shares in the Sandy Creek Water Source;

- (g) 3,942 unit shares in the Tantawangalo Creek Water Source;
- (h) 1,483 unit shares in the Lower Bega / Lower Brogo Rivers Tributaries Water Source;
- (i) 1,781 unit shares in the Wolumla Creek Water Source;
- (j) 208 unit shares in the Bega River Estuary and Tributaries Water Source; and
- (k) 0 unit shares in all other water sources.

26 Share components of aquifer access licences

It is estimated that at the time of commencement of this Plan, the share components of aquifer access licences authorised to take water from these water sources will total 1,003 unit shares, distributed as follows:

- (a) 774 unit shares in the Mid Bega River Sands Water Source;
- (b) 229 unit shares in the Lower Bega / Lower Brogo Rivers Tributaries Water Source; and
- (c) 0 unit shares in all other water sources.

27 Share components of unregulated river (high flow) access licences

It is estimated that at the time of commencement of this Plan, the share components of unregulated river (high flow) access licences authorised to take water from these water sources will total 0 unit shares, distributed as follows:

- (a) 0 unit shares in the Mid Bega River Tributaries Water Source;
- (b) 0 unit shares in the Mid Bega River Sands Water Source;
- (c) 0 unit shares in the Upper Bega / Bemboka Rivers Water Source;
- (d) 0 unit shares in the Upper Bega / Bemboka Rivers Tributaries Water Source;
- (e) 0 unit shares in the Candelo Creek Water Source;

- (f) 0 unit shares in the Sandy Creek Water Source;
- (g) 0 unit shares in the Tantawangalo Creek Water Source;
- (h) 0 unit shares in the Lower Bega / Lower Brogo Rivers Tributaries Water Source; and
- (i) 0 unit shares in the Wolumla Creek Water Source.

Note. The water sources listed above are the only water sources within the Plan area which have been identified as suitable for unregulated river (high flow) access licences. This Plan allows for a specified amount of unregulated river access licences to be converted to the unregulated river (high flow) access licences. However, at the commencement of this Plan, there are no existing access licences of this category, hence the 0 unit shares indicated.

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

It is estimated that at the time of commencement of this Plan, the share components of regulated river (high security) access licences authorised to take water from the Bega and Brogo Regulated Rivers Water Source will total 273 unit shares.

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

It is estimated that at the time of commencement of this Plan, the share components of regulated river (general security) access licences authorised to take water from the Bega and Brogo Regulated Rivers Water Source will total 13,954 unit shares.

30 Share components of supplementary water access licences

It is estimated that at the time of commencement of this Plan, the share components of supplementary water access licences authorised to take water from the Bega and Brogo Regulated Rivers Water Source will total 1,305 unit shares.

Part 6 System operation rules

31 General

The rules in this Part apply to the Bega and Brogo Regulated Rivers Water Source and the Upper Bega / Bemboka Rivers Water Source.

Note. Part 13 allows for amendments to be made to Part 6.

32 Operational rules for Cochrane Dam

- (1) Cochrane Dam water storage must be operated in accordance with the following rules:
 - (a) subject to paragraph (b), between 1 October and 31 March in any water year, the lesser of 3.5 ML/day or daily inflows to Cochrane Dam water storage, as measured at the Cochrane Dam storage gauge (219033), must be released on a daily basis; and
 - (b) releases under paragraph (a) are not required to be made if water is being released from the Cochrane Dam Drought Reserve in accordance with subclause (2).
- (2) An amount of water to be called the Cochrane Dam Drought Reserve is to be set aside in Cochrane Dam water storage and is to be managed in accordance with the following rules:
 - (a) an account of the water credited to and debited from the Cochrane Dam Drought Reserve is to be kept;
 - (b) subject to paragraph (j), when the South East Livestock Health and Pest Authority district is drought declared and inflows to the Cochrane Dam for the 3 months prior to 31 March are less than the 1 in 20 year minimum inflow sequence, then on 30 June of that year, a volume of water must be set aside in Cochrane Dam water storage and credited to the Cochrane Dam Drought Reserve account so that there is a volume of water equivalent to 500 ML in the account;

Note. The 1 in 20 year minimum flow sequence for the 3 month period (January to March) is an average daily flow of 7 ML/day (639 ML for the 3 months).

(c) subject to paragraph (l), when the South East Livestock Health and Pest Authority district is drought declared and inflows to the Cochrane Dam water storage for the 3 months prior to 30 June are less than the 1 in 20 year minimum inflow sequence, then the Minister may require by notice in writing that on 1 October of that year, a volume of water must be set aside in Cochrane Dam water storage and credited to the Cochrane Dam Drought Reserve so that there is a volume of water equivalent to 800 ML in the account;

Note. The 1 in 20 year minimum flow sequence for the 3 month period (April to June) is an average daily flow of 9 ML/day (829 ML for the 3 months).

- (d) on 1 October in any water year, except where a volume of water has been credited to the Cochrane Dam Drought Reserve account under paragraph (c), a volume of water must be set aside in Cochrane Dam water storage and credited to the Cochrane Dam Drought Reserve account so that there is a volume of water equivalent to 500 ML in the account;
- (e) releases of water from the Cochrane Dam Drought Reserve may only be made for the following purposes:
 - to meet the requirements of those access licences specified in clause 65 (16) from Cochrane dam to Kanoona gauge (219032);
 - (ii) maintenance of river connectivity from Cochrane dam to Kanoona gauge (219032);
 - (iii) to meet basic landholder rights requirements from Cochrane dam to Kanoona gauge (219032);
 - (iv) town water supplies from Cochrane dam to Kanoona gauge (219032); and
 - (v) other matters the Minister considers essential;
- (f) the release of water from the Cochrane Dam Drought Reserve held in Cochrane Dam for the purposes described in paragraph (e) shall be determined by the Minister;

- (g) the Cochrane Dam Drought Reserve account must be debited with a volume equal to the amount of water released from Cochrane Dam water storage under paragraph (e);
- (h) the volume of water held in the Cochrane Dam Drought Reserve account may be carried over from one water year to the next;
- (i) where paragraph (c) does not apply and a volume of water has been credited to the Cochrane Dam Drought Reserve account in accordance with paragraph (b), then releases from Cochrane Dam water storage other than releases for the purposes identified in paragraph (e), may not be made unless there is sufficient water within Cochrane Dam water storage to ensure that paragraph (d) can be satisfied;
- (j) where paragraph (c) does not apply and paragraph (b) applies but the volume of water in Cochrane Dam is insufficient to meet the requirements of paragraph (b), then:
 - the next 500 ML of inflows to Cochrane Dam water storage, minus the volume of water already in Cochrane Dam water storage, must be set aside in Cochrane Dam water storage and credited to the Cochrane Dam Drought Reserve account; and
 - (ii) releases from Cochrane Dam water storage other than releases for the purposes identified in paragraph (e), may not be made until such time as the Cochrane Dam Drought Reserve account has been credited in accordance with paragraph (j) (i);
- (k) where paragraph (c) applies, then releases from Cochrane Dam water storage, other than releases for the purposes identified in paragraph (e), may not be made from 1 July to 30 September unless there is sufficient water within Cochrane Dam water storage to ensure that paragraph (c) can be satisfied;
- Note. The rules specified in paragraphs (a) (k) reflect current management practices.
- (l) where paragraph (c) applies but the volume of water in Cochrane Dam water storage is insufficient to meet the requirements of paragraph (c), then:

- (i) the next 800 ML of inflows to Cochrane Dam water storage, minus the volume of water already in the Cochrane Dam Drought Reserve account, must be set aside in Cochrane Dam water storage and credited to the Cochrane Dam Drought Reserve account; and
- (ii) releases from Cochrane Dam water storage other than releases for the purposes identified in paragraph (e), may not be made until such time as the Cochrane Dam Drought Reserve account has been credited under paragraph (l) (i);
- (m) if the Cochrane Dam Drought Reserve account has been credited in accordance with paragraph (c) or (l) and the drought declaration is removed during the period 1 October to 31 March, then the volume of water in the Cochrane Dam Drought Reserve account must be reduced to equal 500 ML minus a volume of water equivalent to any water already released from the Cochrane Dam Drought Reserve account since 1 October in that water year under paragraph (e).

33 Operational rules for Brogo Dam

- (1) Brogo Dam must be operated in accordance with this clause.
- (2) When the volume of water in Brogo Dam water storage is greater than or equal to 50% of full capacity, all inflows to Brogo up to 15 ML/day must be released from Brogo Dam.
- (3) Releases made under subclause (2) cannot be used to meet water orders or basic landholder rights requirements in river reach 1A as defined in Schedule 7 of this Plan.

34 Water delivery and channel capacity constraints for Bega and Brogo Regulated Rivers Water Source

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

- (a) the inundation of private land or interference with access;
- (b) the effects of inundation on the floodplain and associated wetlands;
- (c) the transmission losses expected to occur; and
- (d) capacities of water management structures controlled by the Minister.

Note. Operation of the system at the commencement of this Plan has the following constraints on maximum flows: Brogo Dam - 720 ML/day at full supply level.

35 Rates of change to storage releases from Brogo Dam

Rules regarding rates of change to releases from Brogo Dam should be specified in accordance with any procedures established by the Minister and should take into account:

- (a) relevant environmental considerations;
- (b) damage to river banks; and
- (c) public safety.

36 Supply of orders from Brogo Dam when remaining allocations are low

- (1) In the Bega and Brogo Regulated Rivers Water Source, if in the opinion of the Minister, the volume of water stored in Brogo Dam has reduced to a level where the continuous delivery of water orders would involve unacceptably high delivery losses, then water orders may be grouped and released periodically.
- (2) The Minister should consult with irrigation industry representatives regarding the circumstances under which action under subclause (1) should be taken and the manner of management.

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

37 Dam operation during floods and spills

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

- (2) Providing it is consistent with subclause (1), operation of Brogo Dam during times of flood and spilling of water:
 - (a) should leave the storage at full supply level at the completion of the flood or spilling of water; and
 - (b) should aim to lessen the downstream flood damage where possible.

38 Supply for domestic and stock rights, native title rights and access licences

- The water supply system in the Bega and Brogo Regulated Rivers Water Source is to be managed so that
 - (a) it would be capable of maintaining supply to those persons exercising domestic and stock rights and native title rights in the water source through a repeat of the worst period of low inflows to the Bega and Brogo Regulated Rivers Water Source, as represented by flow information held by the NSW Office of Water;
 - (b) available water determinations of 100% of access licence share component for domestic and stock access licences in the water source can be maintained through a repeat of the worst period of inflows into this water source, as represented in flow information held by the NSW Office of Water;
 - (c) available water determinations of 100% of access licence share component for local water utility access licences in the water source can be maintained through a repeat of the worst period of low inflows into these water sources, as represented in flow information held by the NSW Office of Water; and
 - (d) available water determinations of 0.8 ML per unit of share component for regulated river (high security) access licences in the water source can be maintained through a repeat of the worst period of low inflows into this water source, as represented in flow information held by the NSW Office of Water.
- (2) To achieve subclause (1), sufficient volumes of water must be set aside from assured inflows into the Bega and Brogo Regulated Rivers Water Source and in reserves held in Brogo Dam.

Part 7 Limits to the availability of water

Division 1 Long-term average annual extraction limit

39 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.

40 Volume of the long-term average annual extraction limits

- (1) This clause establishes long-term average annual extraction limits by reference to the EMUs specified in clause 6 of this Plan.
- (2) The long-term average annual extraction limit for each extraction management unit is the sum of:
 - (a) the share components of all access licences in the respective extraction management unit at the commencement of this Plan subject to any variation under subclauses (3) or (4); plus
 - (b) the estimated annual water requirements pursuant to basic landholder rights in the respective extraction management unit at the commencement of this Plan; plus
 - (c) the share components of access licences granted in the respective extraction management unit under the Regulation and clause 54 of this Plan.
- (3) Following the purchase and/or cancellation of an access licence in these water sources, the Minister may vary the respective long-term average annual extraction limit.
- (4) The long-term average annual extraction limit for the Bega River Catchment Extraction Management Unit may be varied upon the conversion of an access licence in that Unit from an unregulated river access licence to an unregulated river (high flow) access licence.
- (5) Any variation made under subclause (4) will result in the long-term average annual

extraction limit being reduced by the amount of the share component of the cancelled unregulated river access licence and increased by the amount of the share component of the new unregulated river (high flow) access licence.

41 Calculation of current levels of annual extraction

- (1) After each water year, the total volume of water extracted during that water year under access licences and pursuant to basic landholder rights must be calculated for each extraction management unit specified in clause 6.
- (2) For the purposes of calculating the total volume of water extracted during a water year, the following must be taken into account:
 - (a) all water taken by holders of all categories of access licences in the water source, except for those access licences to which section 8C of the Act relates; and
 - (b) all water taken pursuant to basic landholder rights.

42 Assessment of average annual extraction against the long term average annual extraction limit

- (1) An assessment of average annual extractions against the long-term average annual extraction limit is to be conducted for each extraction management unit as set out in this clause.
- (2) For the Bega River Catchment Extraction Management Unit, commencing in the fourth water year in which this Plan has effect, the assessments referred to in subclause (1) must compare the long-term average annual extraction limit established in clause 40 against the annual extraction averaged over the preceding three water years.
- (3) For the Bega and Brogo Regulated Rivers Extraction Management Unit, commencing in the second water year in which this Plan has effect, the assessment referred to in subclause (1) must compare the long-term average annual extraction limit established in clause 40 against the annual extraction in the preceding water year.

43 Compliance with the long-term average annual extraction limit in the Bega River Catchment Extraction Management Unit

- Compliance with the long-term average annual extraction limit established for the Bega River Catchment Extraction Management Unit is to be managed in accordance with this clause.
- (2) Commencing in the fourth water year in which this Plan has effect, if in the Minister's opinion the assessment under clause 42 demonstrates that annual extractions in the Bega River Catchment Extraction Management Unit averaged over the preceding three water years, has exceeded the long term average annual extraction limit for that extraction management unit by 5% or more, then the available water determinations for unregulated river access licences, unregulated river (high flow) access licences and aquifer access licences in that extraction management unit are to be reduced in the following water year in accordance with subclause (3).
- (3) The reduction under subclause (2) is to be of an amount that is, in the Minister's opinion, necessary to return average annual extractions in the Bega River Catchment Extraction Management Unit to the long term average annual extraction limit established in this Part.

44 Compliance with the long term average annual extraction limits in the Bega and Brogo Regulated Rivers Extraction Management Unit

- (1) Compliance with the long-term average annual extraction limit established for the Bega and Brogo Regulated Rivers Extraction Management Unit is to be managed in accordance with this clause.
- (2) Commencing in the second water year in which this Plan has effect, if in the Minister's opinion the assessment under clause 42 demonstrates that annual extractions in the Bega and Brogo Regulated Rivers Extraction Management Unit has exceeded the long term average annual extraction limit for that extraction management unit by 5% or more, then the available water determination for supplementary water access licences and the maximum available water determinations that can be made for regulated river (general security) access licences in that extraction management unit are to be reduced in the following water year in accordance with subclause (3).

- (3) The reduction under subclause (2) is to:
 - (a) be of an amount that is, in the Minister's opinion, necessary to return extraction in the Bega and Brogo Regulated Rivers Extraction Management Unit to the long-term annual extraction limit established in this Part; and
 - (b) be applied:
 - (i) firstly, to supplementary water access licences; and
 - (ii) secondly, to regulated river (general security) access licences.

Division 2 Available water determinations

45 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 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) Subject to subclause (3), 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 where share components are 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) For the first water year in which this Plan has effect only, subclause (2) does not apply

to access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.

46 Available water determinations for domestic and stock access licences

- (1) In making available water determinations under section 59 of the Act for domestic and stock access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of this Plan, an available water determination of 200% of access licence share component should be made for domestic and stock access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.
- (3) At the commencement of each water year after the first water year in which this Plan has effect, an available water determination of 100% of access licence share component should be made for domestic and stock access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.
- (4) At the commencement of this Plan and at the commencement of each water year after the first water year in which this Plan has effect, an available water determination of 100% of access licence share component should be made, wherever possible, for domestic and stock access licences with a share component that specifies the Bega and Brogo Regulated Rivers Water Source.

47 Available water determinations for local water utility access licences

- In making available water determinations under section 59 of the Act for local water utility access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of this Plan, an available water determination of 200% of access licence share component should be made for local water utility access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.
- (3) At the commencement of each water year after the first water year in which this Plan has effect, an available water determination of 100% of access licence share

component should be made for local water utility access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.

(4) At the commencement of this Plan and at the commencement of each water year after the first water year in which this Plan has effect, an available water determination of 100% of access licence share component should be made, wherever possible, for local water utility access licences with a share component that specifies the Bega and Brogo Regulated Rivers Water Source.

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

- (1) In making available water determinations under section 59 of the Act for regulated river (high security) access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of this Plan and at the commencement of each water year after the first water year in which this Plan has effect, an available water determination of 0.8 ML per unit share should be made, wherever possible, for regulated river (high security) access licences with a share component that specifies the Bega and Brogo Regulated Rivers Water Source.
- (3) Subject to the limits in clause 45 (2), additional available water determinations for regulated river (high security) access licences in the Bega and Brogo Regulated Rivers Water Source may be made after the sum of available water determinations for domestic and stock access licences and local water utility access licences in the water source in that water year equals 100% of share components and there is sufficient water available after making provision for:
 - (a) the operational rules established in clause 33;
 - (b) requirements for domestic and stock rights;
 - (c) requirements for native title rights;
 - (d) requirements for domestic and stock access licences;

- (e) requirements for local water utility access licences;
- (f) allocations remaining in access licence water allocation accounts from previous available water determinations;
- (g) water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) (f);
- (h) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from available water determinations; and
- (i) any other relevant matters.

Note. The effect of this clause is that an available water determination for regulated river (high security) access licences should not be made until the available water determinations for local water utility access licences and domestic and stock access licences reach 100% of share components.

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

- (1) In making available water determinations under section 59 of the Act for regulated river (general security) access licences, the Minister should consider the rules in this clause.
- (2) Subject to subclause (4), whenever the sum of available water determinations in a water year for regulated river (high security) access licences is 0.8 ML or more but less than 1 ML per unit share, then for each 0.01 ML per unit share of additional available water determination made for regulated river (high security) access licences, an available water determination of 0.02 ML per unit share should be made for regulated river (general security) access licences.
- (3) Subject to subclause (4), whenever the sum of available water determinations in a water year for regulated river (high security) access licences is equal to 1 ML per unit share, then additional available water determinations may be made for regulated river (general security) access licences subject to the limits in clause 45 (2).
- (4) Available water determinations for regulated river (general security) access licences may be made where there is sufficient water available after taking into account:

- (a) the operational rules established in clause 33;
- (b) requirements for domestic and stock rights;
- (c) requirements for native title rights;
- (d) requirements for domestic and stock access licences;
- (e) requirements for local water utility access licences;
- (f) requirements for regulated river (high security) access licences;
- (g) allocations remaining in access licence water allocation accounts from previous available water determinations;
- (h) water losses associated with the holding and delivery of water to meet the requirements specified in paragraphs (a) (g);
- (i) an appropriate volume to meet water losses associated with the holding and delivery of water resulting from available water determinations; and
- (j) any other relevant matters.

Notes.

- 1. Where the long-term average annual extraction limit has been exceeded, then the available water determination for regulated river (general security) access licences may be reduced in accordance with Division 1 of this Part.
- 2. The effect of this clause is that an available water determination for regulated river (general security) access licences should not be made until the available water determinations for regulated river (high security) access licences reach 0.8 ML per unit of share component.

50 Available water determinations for unregulated river access licences

- (1) In making available water determinations under section 59 of the Act for unregulated river access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of this Plan, an available water determination of 2 ML per unit of share component should be made for unregulated river access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.

(3) At the commencement of each water year after the first water year in which this Plan has effect, an available water determination of 1 ML per unit of share component, or such lower amount that results from Division 1 of this Part, should be made for unregulated river access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.

Note. Where the long-term average annual extraction limit has been exceeded, then the available water determination for unregulated river access licences will be reduced in accordance with Division 1 of this Part.

51 Available water determinations for unregulated river (high flow) access licences

- (1) In making available water determinations under section 59 of the Act for unregulated river (high flow) access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of this Plan, an available water determination of 2 ML per unit of share component should be made for unregulated river (high flow) access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.
- (3) At the commencement of each water year after the first water year of this Plan in which this Plan has effect, an available water determination of 1 ML per unit of share component, or such lower amount that results from Division 1 of this Part, should be made for unregulated river (high flow) access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.

Note. Where the long-term average annual extraction limit has been exceeded, then the available water determination for unregulated river (high flow) access licences will be reduced in accordance with Division 1 of this Part.

52 Available water determinations for aquifer access licences

- (1) In making available water determinations under section 59 of the Act for aquifer access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of this Plan, an available water determination of 2 ML per unit of share component should be made for aquifer access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo

Regulated Rivers Water Source.

(3) At the commencement of each water year after the first water year of this Plan in which this Plan has effect, an available water determination of 1 ML per unit of share component, or such lower amount that results from Division 1 of this Part, should be made for aquifer access licences with a share component that specifies one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.

Note. Where the long-term average annual extraction limit has been exceeded, then the available water determination for aquifer access licences will be reduced in accordance with Division 1 of this Part.

53 Available water determinations for supplementary water access licences

- (1) In making available water determinations under section 59 of the Act for supplementary water access licences, the Minister should consider the rules in this clause.
- (2) At the commencement of this Plan and at the commencement of each water year after the first water year in which this Plan has effect, an available water determination of 1 ML per unit of share component, or such lower amount that results from Division 1 of this Part, should be made for supplementary water access licences with a share component that specifies the Bega and Brogo Regulated Rivers Water Source.

Note. Where the long-term average annual extraction limit has been exceeded, then the available water determination for supplementary water access licences will be reduced in accordance with Division 1 of this Part.

Part 8 Rules for granting access licences

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

54 Specific purpose access licences

- (1) Applications for specific purpose access licences, other than those permitted under the Regulation, may not be made in these water sources, except for:
 - (a) a local water utility access licence in the Mid Bega River Sands Water Source to be held by the Bega Valley Shire Council, subject to there being a reduction equivalent to the share component of the new licence to the share components of local water utility access licences held by the Bega Valley Shire Council in the Upper Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source;
 - (b) an unregulated river (subcategory "Aboriginal community development") access licence for the taking of water from B Class flows only in any of the following water sources and management zones:
 - (i) Upper Bega / Bemboka Rivers Water Source;
 - Lower Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source; and
 - (iii) Lower Bega / Lower Brogo Rivers Tributaries Water Source; and
 - (c) an unregulated river (subcategory "Aboriginal community development") access licence for the taking of water from C Class flows only in the Mid Bega River Sands Water Source.
- (2) 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.

- (3) A local water utility access licence must not be granted in the Mid Bega River Sands Water Source if the granting of the access licence would cause the sum of the share components of all local water utility access licences in that water source to exceed an amount that is equal to the sum of the share components of all local water utility access licences in the water source at the commencement of this Plan plus 500 ML.
- (4) An unregulated river (subcategory "Aboriginal community development") access licence must not be granted in the following water sources if the granting of the access licence would cause the sum of the share components of all unregulated river (subcategory "Aboriginal community development") access licences across all of the following water sources and management zone, to exceed 500 ML/year:
 - (a) Mid Bega River Sands Water Source;
 - (b) Upper Bega / Bemboka Rivers Water Source;
 - (c) Lower Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source; and
 - (d) Lower Bega / Lower Brogo Rivers Tributaries Water Source.

Note. An unregulated river (subcategory "Aboriginal community development") access licence will not be fully transferable. Allocations under these licences will be able to be traded to non-Aboriginal people; however, the license itself can only be traded amongst Aboriginal people, and as such will remain in the Aboriginal community for the life of the licence. These licences will not be able to be converted to any other category of licence. Aboriginal communities, enterprises and individuals are encouraged to seek financial assistance from funding bodies to purchase other categories of access licences if they require fully transferable licences.

- (5) 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.
- (6) A specific purpose access licence must not be granted in the Upper Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source.

Note. The Regulation will provide for the creation of new access licences that authorise the taking of water between the defined tidal limit and the mangrove limit in the Bega River Estuary and Tributaries Water Source (for which no entitlement has previously been required under the *Water Act 1912*).

Part 9 Rules for managing access licences

Division 1 Water allocation account management rules

55 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.

Notes.

- 1 The Act provides for the keeping of water allocation accounts.
- 2 Part 13 allows for amendments to be made to Division 1.

56 Individual access licence account management rules for these water sources, excluding the Bega and Brogo Regulated Rivers Water Source

Note. The rules in this clause impose a restriction on the volume of water that may be taken under an access licence over a specified period of time. This restriction is 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.

- (1) This clause applies to all access licences with share components which specify one of these water sources, excluding the Bega and Brogo Regulated Rivers Water Source.
- (2) For the period of the first three water years 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, an unregulated river access licence, an unregulated river (high flow) access licence or an aquifer access licence, must not exceed a volume equal to:
 - (a) 50% of the water allocations accrued to the water allocation account for the access licence from available water determinations in the first water year; plus
 - (b) the sum of water allocations accrued to the water allocation account for the access licence from available water determinations in the second and third water years; plus
 - (c) 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 water years; plus

- (d) any water allocations re-credited to the water allocation account for the access licence in accordance with section 76 of the Act, in those water years.
- (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, an unregulated river access licence, an unregulated river (high flow) access licence or an aquifer access licence, 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 water years;
 - (ii) the water allocations carried over from the water year prior to those three water years under subclause (4);
 - (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 water years; and
 - (iv) any water allocations re-credited to the water allocation account for the access licence in accordance with section 76 of the Act, in those water years; or
 - (b) the sum of:
 - 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 water years; and
- (v) any water allocations re-credited to the water allocation account for the access licence in accordance with section 76 of the Act, in those water years.
- (4) The maximum water allocation that can be carried over in the water allocation account for a domestic and stock access licence, a local water utility access licence, an unregulated river access licence, an unregulated river (high flow) access licence or an aquifer access licence, from one water year to the next is equal to:
 - (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.

57 Individual access licence account management rules for the Bega and Brogo Regulated Rivers Water Source

- This clause applies to all access licences with share components which specify the Bega and Brogo Regulated Rivers Water Source.
- (2) In any water year, the maximum volume of water that may be taken under an access licence must not exceed a volume equal to:
 - (a) the sum of water allocations accrued under the access licence from available water determinations in that water year, plus
 - (b) the water allocations carried over from the water year prior to that water year under subclause (4); plus
 - (c) the amount of water that may be taken under clause 61; plus
 - (d) any water allocations assigned from another access licence under section 71T of the Act, in that water year; plus

- (e) any water allocations re-credited in accordance with section 76 of the Act, in that water year; minus
- (f) any water allocations assigned to another access licence under section 71T of the Act, in that water year.
- (3) Except as provided for under subclause (4), water allocations remaining in water allocation account of an access licence cannot be carried over from one water year to the next.
- (4) Water allocations remaining in the water allocation accounts of regulated river (high security) access licences in the Bega and Brogo Regulated Rivers Water Source may be carried over from one water year to the next, provided that:
 - (a) the available water determination to be made at the commencement of the following water year for regulated river (high security) access licences will be less than 0.8 ML per unit share; and
 - (b) the volume carried over does not exceed an amount equivalent to 0.1 ML per unit share of access licence share component.

Division 2 Rules for access licences in the Bega and Brogo Regulated Rivers Water Source

58 General

The rules in this Division apply to the taking of water under an access licence with a share component that specifies the Bega and Brogo Regulated Rivers Water Source.

59 General priority of extractions

Where the extraction component of an access licence in the Bega and Brogo Regulated Rivers Water Source does not specify a rate of extraction as a share of supply capability or a volume per unit of time, the following priority of extraction applies whenever supply capability is insufficient to satisfy orders for water in any section of these water sources:

- (a) water is to be supplied to domestic and stock access licences, local water utility access licences and regulated river (high security) access licences that have placed orders for water, in that order; and
- (b) then any remaining supply capability is to be shared between regulated river (general security) access licences that have placed an order for water, in proportion to the share components specified on the access licences.

Note. During periods of channel capacity constraint, the implementation of the above provisions may result in short term ordering delays.

60 Numerical specification of extraction components

- (1) The extraction components of access licences in the Bega and Brogo Regulated Rivers Water Source may be amended under section 68A of the Act to specify a volume per unit of time or share of supply capability in order to share the impacts of any future physical supply constraint amongst access licences.
- (2) The rate or unit shares specified in the amended extraction components of domestic and stock access licences, local water utility access licences and regulated river (high security) access licences under subclause (1) should, where possible, be the amount which in the opinion of the Minister is sufficient to satisfy the maximum daily water requirements of those access licences.
- (3) The rate or unit shares specified in the amended extraction components of regulated river (general security) access licences under subclause (1) should be in proportion to the share component of each access licence.

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

- This clause provides for the taking of water from uncontrolled flows in accordance with an order made under section 85A of the Act.
- (2) An order under section 85A of the Act may authorise the taking of water from uncontrolled flows that arise from unregulated inflows to the Bega and Brogo Regulated Rivers Water Source that have not been credited to the water allocation account for a regulated river (general security) access licence:

- (a) with a share component that specifies the Bega and Brogo Regulated Rivers Water Source; and
- (b) which nominates a metered work.
- (3) The following rules apply to the taking of uncontrolled flows that arise from unregulated inflows to the water source specified in subclause (2):
 - (a) water may only be taken from uncontrolled flows in accordance with announcements made by the Minister. Announcements may be made by the Minister for the taking of water from uncontrolled flows in the following sections of the water source only as defined in Schedule 7:
 - (i) river reach 1A;
 - (ii) river reach 1B;
 - (iii) river reach 1C; and
 - (iv) river reach 2;
 - (b) water may only be taken from uncontrolled flows using a metered work;
 - (c) the taking of water from uncontrolled flows in river reach 1A is only permitted to commence when:
 - the discharge over the Brogo Dam spillway in the immediately preceding
 24 hour period has been in excess of 50 ML/day on a rising river and 20 ML/day on a falling river; or
 - (ii) a discharge through the control valves of the Brogo Dam in the immediate preceding period has prevented a spillage over the spillway;
 - (d) the taking of water from uncontrolled flows in river reach 1B is only permitted to commence when the conditions specified in paragraph (c) have been satisfied and the flows at the North Brogo gauge (219013) have exceeded 50 ML/day for at least 24 hours on a rising river and 20 ML/day on a falling river;

- (e) the taking of water from uncontrolled flows in river reach 1C is only permitted to commence when the flow is sufficient to ensure that the flows at the Angledale gauge (219025) exceed 50 ML/day for at least 24 hours on a rising river and 20 ML/day on a falling river;
- (f) the taking of water from uncontrolled flows in river reach 2 is only permitted to commence when:
 - (i) the river flows at the Angledale gauge (219025) have exceeded 50 ML/day for at least 24 hours on a rising river and 20 ML/day on a falling river; or
 - (ii) the flows at the Kanoona gauge (219032) have exceeded 65 ML/day for at least 24 hours.
- (4) In any uncontrolled flow event, total extraction of uncontrolled flow under subclause
 (2) in each section of the water source specified in subclause (3) (a) under regulated river (general security) access licences must not exceed an amount that is equal to 50% of the uncontrolled flow event volume.
- (5) Announcements providing access to uncontrolled flows in the Bega and Brogo Regulated Rivers Water Source, may only occur when flows are in excess of those necessary to satisfy the system operation rules specified in clause 33 and the volume required to supply water for basic landholder rights and higher priority access licences in the Bega and Brogo Regulated Rivers Water Source.
- (6) Access to uncontrolled flows must be shared in proportion to the share component of each regulated river (general security) access licence.
- (7) In any water year, the total amount of uncontrolled flow that may be taken under each regulated river (general security) access licence is limited to an amount that is equal to the difference between:
 - (a) the sum of available water determinations for that water year for regulated river (general security) access licences; and
 - (b) the maximum sum of available water determinations that can be made for

regulated river (general security) access licences under Division 2 of Part 7 of this Plan.

- (8) Within 7 days of ceasing to take water from uncontrolled flows, regulated river (general security) access licence holders must supply State Water with meter readings taken immediately prior to and after the taking of uncontrolled flow.
- (9) If the total amount of uncontrolled flow taken under an access licence exceeds the limit specified in subclause (7), then a volume equivalent to the exceedence must be debited from the water allocation account for the access licence in that water year.

Note. It is possible for the limits specified in subclause (7) to be exceeded if available water determinations increase after uncontrolled flows have been taken.

(10) In this clause *metered work* has the same meaning as under section 91I (4) of the Act.Note. Part 13 of this Plan allows for clause 61 to be amended.

62 Taking of water under supplementary water access licences

- (1) Water may only be taken under a supplementary water access licence in the Bega and Brogo Regulated Rivers Water Source in accordance with announcements made by the Minister in relation to a supplementary flow event.
- (2) The following rules apply to announcements to authorise the taking of water under a supplementary water access licence during a supplementary flow event as referred to in subclause (1):
 - (a) subject to paragraph (b), announcements should be made for the following sections of the water source as defined in Schedule 7:
 - (i) river reach 1A;
 - (ii) river reach 1B;
 - (iii) river reach 1C; and
 - (iv) river reach 2;
 - (b) announcements should only be made when flows are in excess of those

necessary to satisfy the system operation rules specified in clause 33 and the volume required to supply water for basic landholder rights and higher priority access licences in this water source;

- (c) the taking of water under a supplementary water access licence nominating water supply works in river reach 1A should only be permitted to commence when the discharge over the Brogo Dam spillway in the immediately preceding 24 hour period has been in excess of 100 ML/day, or a discharge through the control valves in the immediate preceding 24 hour period has prevented a spillage over the spillway;
- (d) the taking of water under a supplementary water access licence nominating water supply works in river reach 1B should only be permitted to commence when conditions as specified in paragraph (b) have been satisfied, and the flows at the North Brogo gauge (219013) exceed 100 ML/day for at least 24 hours;
- (e) the taking of water under a supplementary water access licence nominating water supply works in river reach 1C should only be permitted to commence when the flow is sufficient to ensure that the flows at the Angledale gauge (219025) exceed 100 ML/day for at least 24 hours;
- (f) the taking of water under a supplementary water access licence nominating water supply works in river reach 2 should only be permitted to commence when:
 - (i) the river flows at the Angledale gauge (219025) exceed 100 ML/day for at least 24 hours; or
 - (ii) the flows at the Kanoona gauge (219032) exceed 160 ML/day for at least 24 hours;
- (g) during any period of access, total extractions under supplementary water access licences in each section of the water source specified in paragraph (a) must not exceed an amount that is equal to 50% of the supplementary flow event volume; and
- (h) access to water is to be shared in proportion to the share component of each

supplementary water access licence.

Note. Part 13 of this Plan allows for clause 62 to be amended.

Division 3 Rules for access licences in these water sources, excluding the Bega and Brogo Regulated Rivers Water Source

63 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, excluding the Bega and Brogo Regulated Rivers Water Source.

Note. Part 13 allows for amendments to be made to Division 3.

64 Flow classes

- (1) This Plan establishes the flow classes specified in Column 3 of Table B as the basis for the sharing of flows on a daily basis in the water sources to which this Division applies.
- (2) The flow classes in Column 3 of Table B, and the reference points specified in Column 6 of Table B, are established for each water source specified in Column 1 and each management zone specified in Column 2 of Table B.
- (3) The flow classes commence on the date specified in Column 4 of Table B.
- (4) A flow class applies in the respective water source or management zone, on the day specified in Column 7 of Table B, when flows (the flow of water in ML/day) or groundwater levels (in metres Australian Height Datum, hereafter *m AHD*) as measured at the reference point specified in Column 6 of Table B are equal to the flow or groundwater level specified in Column 5 of Table B.
- (5) For the purpose of Table B:
 - (a) Year 1 of this Plan means from the date of commencement of this Plan; and
 - (b) *Year 6 of this Plan* means from 1 July in the sixth water year after this Plan has commenced.

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Notes.

- 1 The flow classes, reference points, water sources or management zones to which a flow class applies or any other matter listed in Table B may be amended as provided for in Part 13 of this Plan.
- 2 Only those water sources for which flow classes have been established at the commencement of this Plan are shown in Table B.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Water Source	Management Zone	Flow class	Commencement	Flow (ML/ day) or groundwater level (m AHD)	Reference point	Day on which flow class applies
Mid Bega River Tributaries Water Source.		Very Low Flow Class.	Year 1 of this Plan.	2 ML/day or less.	Double Creek gauge near Brogo (219017) in the Lower Bega / Lower Brogo Rivers Tributaries Water Source.	Same day.
		A Class.	Year 1 of this Plan.	More than 2 ML/day and 11 ML/day or less.		Same day.
		B Class.	Year 1 of this Plan.	More than 11 ML/day.		Same day.
Mid Bega River Sands Water Source.		Very Low Flow Class.	Year 1 of this Plan.	4.5 m AHD or less.	Groundwater monitoring	Same day.
Mid Bega River Sands Water Source.		Low Flow Class.	Year 1 of this Plan.	More than 4.5 m AHD and 5.5 m AHD or less.	bore (GW039001).	Same day.
Mid Bega River Sands Water Source.		A1 Class.	Year 1 of this Plan.	Groundwater level is more than 5.5 m AHD and flow at the Kanoona gauge is 65 ML/day or less and no visible flow in the Bega River immediately downstream of the Princess Highway bridge.	Groundwater level at groundwater monitoring bore (GW039001), flow at Kanoona gauge (219032) in the Upper Bega / Bemboka Rivers Water Source, Bega River immediately downstream of Princess Highway bridge.	Same day.

Table B – Flow Classes

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Water Source	Management Zone	Flow class	Commencement	Flow (ML/ day) or groundwater level (m AHD)	Reference point	Day on which flow class applies
Mid Bega River Sands Water Source.		A2 Class.	Year 1 of this Plan.	Flow at the Kanoona gauge is 65 ML/day or less and visible flow in the Bega River immediately downstream of the Princess Highway bridge.	Flow at Kanoona gauge (219032) in the Upper Bega / Bemboka Rivers Water Source, Bega River immediately downstream of Princess Highway bridge.	Same day.
Mid Bega River Sands Water Source.		B Class.	Year 1 of this Plan.	Flow at Kanoona gauge is 65 ML/day or more and 160 ML/day or less and visible flow in the Bega River immediately downstream of the Princess Highway bridge.	Flow at Kanoona gauge (219032) in the Upper Bega / Bemboka Rivers Water Source, Bega River immediately downstream of Princess Highway bridge.	Same day.
Mid Bega River Sands Water Source.		C Class.	Year 1 of this Plan.	160 ML/day or more.	Kanoona gauge (219032) in the Upper Bega / Bemboka Rivers Water Source.	Same day.
		Very Low Flow Class.	Year 1 of this Plan.	2 ML/day or less.		Same day.
Upper Bega / Bemboka Rivers Water Source.		Low Flow Class.	Year 1 of this Plan.	More than 2 ML/day and 5 ML/day or less.		Same day.
		A Class.	Year 1 of this Plan.	More than 5 ML/day and 65 ML/day or less.	Kanoona gauge (219032).	Same day.
		B Class.	Year 1 of this Plan.	More than 65 ML/day and 160 ML/day or less.		Same day.
		C Class.	Year 1 of this Plan.	More than 160 ML/day.		Same day.
Upper Bega / Bemboka Rivers Tributaries Water Source.		Very Low Flow Class.	Year 1 of this Plan.	2 ML/day or less.	Double Creek gauge near	Same day
		A Class.	Year 1 of this Plan.	More than 2 ML/day and 28 ML/day or less.	(219017) in the Lower Bega / Lower	Same day.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Water Source	Management Zone	Flow class	Commencement	Flow (ML/ day) or groundwater level (m AHD)	Reference point	Day on which flow class applies
		B Class.	Year 1 of this Plan.	More than 28 ML/day.	Brogo Rivers Tributaries Water Source.	Same day.
Candelo Creek Water Source.		Very Low Flow Class.	Year 1 of this Plan.	3 ML/day or less.	Candelo Creek gauge (219034).	Same day.
		A Class.	Year 1 of this Plan.	More than 3 ML/day and 14 ML/day or less.		Same day.
		B Class.	Year 1 of this Plan.	More than 14 ML/day.		Same day.
		Very Low Flow Class.	Year 1 of this Plan.	3 ML/day or less.	Candelo Creek gauge (219034) in the Candelo Creek Water Source.	Same day.
Sandy Creek Water Source.		A Class.	Year 1 of this Plan.	More than 3 ML/day and 14 ML/day or less.		Same day.
		B Class.	Year 1 of this Plan.	More than 14 ML/day.		Same day.
	Lower Tantawangalo Creek Management Zone.	Very Low Flow Class.	Year 1 of this Plan.	2 ML/day or less.	Tantawangalo Creek at Candelo Dam Site gauge (219022).	Same day.
Tantawangalo Creek Water Source.		Very Low Flow Class.	Year 6 of this Plan.	5 ML/day or less.		Same day.
		A Class.	Year 1 of this Plan.	More than 2 ML/day and 60 ML/day or less.		Same day.
		A Class.	Year 6 of this Plan.	5 ML/day or more and 60 ML/day or less.		Same day.
		B Class.	Year 1 of this Plan.	More than 60 ML/day.		Same day.
		Very Low Flow Class.	Year 1 of this Plan.	2 ML/day or less.	Double Creek gauge near Brogo (219017).	Same day.
Lower Bega / Lower Brogo Rivers Tributaries Water Source.		A Class.	Year 1 of this Plan.	More than 2 ML/day and 28 ML/day or less.		Same day.
		B Class.	Year 1 of this Plan.	More than 28 ML/day.		Same day.
Wolumla Creek Water Source.		Very Low Flow Class.	Year 1 of this Plan.	3 ML/day or less.	Candelo	Same day.
		A Class.	Year 1 of this Plan.	More than 3 ML/day and 35 ML/day or less.	Creek gauge (219034) in the Candelo Creek Water	Same day.
		B Class.	Year 1 of this Plan.	More than 35 ML/day.	Source.	Same day.

Notes.

- 1. For Double Creek at Double Creek near Brogo gauge (219017):
 - 2 ML/day corresponds to the estimated 79th percentile flow;
 - 11 ML/day corresponds to the estimated 50th percentile flow; and
 - 28 ML/day corresponds to the estimated 30th percentile flow.
- 2. For Bega River at Kanoona gauge (219032):

- 2 ML/day corresponds to the estimated 100th percentile flow;
- 65 ML/day corresponds to the estimated 80th percentile flow; and
- 160 ML/day corresponds to the estimated 50th percentile flow.
- 3. For Candelo Creek at Greenmount Road (Yurammie no. 4) gauge (219034):
 - 3 ML/day corresponds to the estimated 74th percentile flow;
 - 14 ML/day corresponds to the estimated 30th percentile flow; and
 - 35 ML/day corresponds to the estimated 15th percentile flow of all days.
- 4. For Tantawangalo Creek at Tantawangalo Creek gauge at Candelo Dam Site (219022):
 - 2 ML corresponds to the estimated 99th percentile flow;
 - 5 ML/day corresponds to the estimated 97th percentile flow; and
 - 60 ML/day corresponds to the estimated 50th percentile flow.
- 5. The flow percentiles above refer to flows on all days at the gauge and include all days of record.
- 6. Whilst the name of the gauging station 219022 is Tantawangalo Creek at Candelo Dam Site, this does not mean that a dam is currently being considered at this site.

65 Access rules for the taking of surface water

- (1) This clause applies to the taking of water under an access licence from these water sources excluding:
 - (a) the taking of water from the Bega and Brogo Regulated Rivers Water Source;
 - (b) the taking of water from these alluvial sediments;
 - (c) the taking of water from the Upper Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source; and
 - (d) the taking of water under an access licence that nominates an aquifer interference approval.
- (2) Subject to subclause (16), water must not be taken under an access licences with a share component that specifies a water source or an extraction component that specifies a management zone with a Very Low Flow Class that has commenced, when flows in that water source or management zone are in the Very Low Flow Class. This subclause does not apply to:
 - (a) the taking of water under an access licence to which subclause (4) applies; and
 - (b) the taking of water from a floodplain wetland.

- (3) Subject to subclause (16), from year 6 of this Plan, water must not be taken under an access licence that:
 - (a) has not been accredited under subclause (5); and
 - (b) has a share component which specifies a water source, or an extraction component that specifies a management zone, with a Low Flow Class that has commenced;

when flows in that water source or management zone are in the Low Flow Class. This subclause does not apply to the taking of water from a floodplain wetland.

- (4) Subject to subclause (16), water must not be taken under an access licence where the cease to pump threshold on the entitlement issued under Part 2 of the *Water Act 1912* that the access licence replaces, is in the Minister's opinion, higher than the upper limit of the relevant Very Low Flow Class (as specified in Column 5 of Table B) that commenced on the date of commencement of this Plan, when flows are at or less than the cease to pump threshold that was specified on the replaced *Water Act 1912* entitlement. In this subclause, *cease to pump threshold* means a condition or restriction on the replaced entitlement which places a limit on when water may be taken. This subclause does not apply to:
 - (a) the taking of water from a floodplain wetland;
 - (b) access licences with a share component that specifies the Upper Bega / Bemboka Rivers Water Source; and
 - (c) access licences accredited under the scheme referred to in subclause (5).

Note. Those licences and daily access rules that have been identified as higher than the upper limit of the relevant Very Low Flow Class are specified in Appendix 3.

- (5) Access licence holders may be accredited under the Southern Rivers Catchment Management Authority Accreditation Scheme in the following water sources:
 - (a) Mid Bega River Sands Water Source; and
 - (b) Upper Bega / Bemboka Rivers Water Source.

Note. Licence holders can become accredited by implementing and maintaining a range of practices that contribute positively to river health. By establishing different access rules for accredited and non-accredited licence holders, this Plan aims to encourage licence holders to undertake activities that contribute to improved river health.

- (6) Water must not be taken under an unregulated river (high flow) access licence or an unregulated river (subcategory "Aboriginal community development") access licence, when flows in the respective water source are less than:
 - (a) the lower limit of B Class for access licences with share components that specify the:
 - (i) Mid Bega River Tributaries Water Source;
 - (ii) Upper Bega / Bemboka Rivers Tributaries Water Source;
 - (iii) Candelo Creek Water Source;
 - (iv) Sandy Creek Water Source;
 - (v) Lower Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source;
 - (vi) Lower Bega / Lower Brogo Rivers Tributaries Water Source; or
 - (vii) Wolumla Creek Water Source; or
 - (b) the lower limit of C Class for access licences with share components that specify the Mid Bega River Sands Water Source or the Upper Bega / Bemboka Rivers Water Source.
- (7) Subject to subclause (16), water must not be taken under an access licence if there is no visible flow in the water source at the location at which water is proposed to be taken. This subclause does not apply to the taking of water from floodplain wetlands.
- (8) Water must not be taken from an in-river dam pool unless the in-river dam is passing such inflows as specified on the water supply work approval for the in-river dam.
- (9) The inflows to be specified on the water supply work approval for the in-river dam referred to in subclause (8) are:

- (a) the inflows that were specified in conditions on the *Water Act 1912* entitlement that the approval replaces; or
- (b) where no inflows were specified, the amount of inflows determined by the Minister.
- (10) Subject to subclause (16), water must not be taken for the purposes of dam filling under an access licence to which Schedule 2 applies in contravention of the access rule specified adjacent in Column 3 of Schedule 2 for that access licence.
- (11) This subclause applies only to water sources and management zones with a Very Low Flow Class that has commenced. Subject to subclause (16), if flows have not exceeded the upper limit of the Very Low Flow Class for a period of 30 or more consecutive days, then water must not be taken under an access licence to which this subclause applies for a period of 24 hours after flows next exceed the upper limit of the Very Low Flow Class. This subclause does not apply to the taking of water from a floodplain wetland.
- (12) This subclause applies only to water sources and management zones with a Low Flow Class that has commenced. Subject to subclause (16), if flows have not exceeded the upper limit of the Low Flow Class for a period of 30 or more consecutive days, then water must not be taken under an access licence to which this subclause applies for a period of 24 hours after flows next exceed the upper limit of the Low Flow Class. This subclause does not apply to the taking of water from a floodplain wetland.
- (13) This subclause applies only to water sources and management zones with an A Class or A1 Class that has commenced. Subject to subclause (16), if flows have not exceeded the upper limit of the A Class or A1 Class for a period of 30 or more consecutive days, then water must not be taken under an access licences to which this subclause applies for a period of 24 hours after flows next exceed the upper limit of the A Class or A1 Class. This subclause does not apply to the taking of water from a floodplain wetland.
- (14) This subclause applies only to access licences with a share component that specifies the Upper Bega / Bemboka Rivers Water Source or the Mid Bega River Sands Water Sources. Subject to subclause (16), if flows have not exceeded the upper limit of the B

Class for a period of 30 or more consecutive days, then water must not be taken under an access licence to which this subclause applies for a period of 24 hours after flows next exceed the upper limit of the B Class. This subclause does not apply to the taking of water from a floodplain wetland.

- (15) Subject to subclause (16), water must not be taken by an access licence which nominates a water supply work approval used to take water from a floodplain wetland, unless the water level in the wetland is higher than 50% of the full containment volume of the wetland.
- (16) Subclauses (2), (3), (4), (7) and (10) (15) do not apply to the following:
 - (a) the taking of water under an access licence to which clause 1 of Schedule 3 applies, for any of the purposes listed below, provided that 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 (17):
 - (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, for the first 3 years of this Plan;
 - (c) the taking of water for stock watering only under a domestic and stock access licence or a domestic and stock (subcategory "stock") access licence that existed at the commencement of this Plan, for the first 3 years of this Plan, provided the volume of water taken does not exceed 14 litres per hectare of grazeable area per day;
 - (d) subject to paragraph (e) and (f), the taking of water under a local water utility

access licence or an unregulated river (subcategory "town water supply") access licence to which clause 2 of Schedule 3 applies;

- (e) the taking of water under a local water utility access licence held by Bega Valley Shire Council for the town of Bemboka in the Upper Bega / Bemboka Rivers Water Source to which clause 2 of Schedule 3 applies, provided the volume of water taken does not exceed:
 - (i) 0.2 ML/day, where releases from the Cochrane Dam Drought Reserve under clause 32 (2) are not being made; or
 - (ii) 0.1 ML/day, where releases from the Cochrane Dam Drought Reserve under clause 32 (2) are being made;
- (f) the taking of water under a local water utility access licence held by Bega Valley Shire Council in the Mid Bega River Sands Water Source to which clause 2 of Schedule 3 applies, provided the volume of water taken does not exceed 3.5 ML/day;
- (g) the taking of water using a run–off harvesting dam or from an in-river dam pool; and
- (h) the taking of water under an unregulated river access licence to which clause 3 of Schedule 3 applies.
- (17) The Minister may amend a water supply work approval to reduce the maximum daily volume limit imposed by the rule under subclause (16) (a) if the Minister is satisfied that the reduced volume is satisfactory to meet the purpose referred to in subclause (16) (a).

Note. Part 13 of this Plan allows for amendments to be made to clause 65.

66 Access rules for the Upper Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source

Notes.

1 The Tantawangalo town water supply weir provides a vital source of water for the Tantawangalo-Kiah water supply scheme, servicing the southern parts of Bega Valley Shire, including the towns of Merimbula, Tura Beach, Pambula and Pambula Beach, the villages of Candelo and Wolumla and many individual properties supplied directly from

the trunk main pipeline.

- 2 Extraction from the Tantawangalo town water supply weir during low flows and very low flows impacts on downstream reaches of the creek by reducing the volume of water remaining in the river for the environment and for essential domestic and stock basic landholder rights.
- (1) This clause applies to the taking of water under access licences with extraction components that specify the Upper Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source. This clause does not apply to the taking of water under an access licence that nominates an aquifer interference approval.
- (2) Subject to subclause (4), an access licence held by Bega Valley Shire Council for the Tantawangalo-Kiah town water supply system in the Upper Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source to which clause 2 of Schedule 3 applies, may take no more than 0.2 ML/day of water:
 - (a) in years 1 to 5 of this Plan when the flow in Tantawangalo Creek at Candelo Dam Site gauge (219022) is less than 2 ML/day; and
 - (b) after year 5 of this Plan, when the flow in Tantawangalo Creek at Candelo Dam Site gauge (219022) is less than 5 ML/day.
- (3) Subclause (2) continues to apply after the Minister is satisfied that major augmentation of the access licence holder's water supply system has occurred, provided all to Tantawangalo weir are passed downstream.
- (4) Following the commissioning of the Bega to Yellow Pinch dam pipeline, the taking of water from Tantawangalo town water supply weir will be subject to the following access rules:
 - (a) when daily flows are less than or equal to 2.2 ML/day at the Tantawangalo Creek gauge (219006) at Tantawangalo Mountain (Dam), water must not be taken from the weir and all inflows to the weir must be passed downstream, except for extraction permitted under subclause (2), provided that the daily volume taken does not exceed:
 - (i) 50% of the flow at the Tantawangalo Creek gauge (219006) at Tantawangalo Mountain (Dam) when the daily flows at the Tantawangalo

Creek gauge (219006) at Tantawangalo Mountain (Dam) are less than 0.4 ML/day; or

- (ii) 0.2 ML/day when the daily flows at the Tantawangalo Creek gauge
 (219006) at Tantawangalo Mountain (Dam) are equal to or greater than
 0.4 ML/day; and
- (b) when daily flows are greater than 2.2 ML/day at the Tantawangalo Creek gauge (219006) at Tantawangalo Mountain (Dam), the daily volume taken must not exceed the lesser of:
 - (i) 50% of the daily flow up to a maximum of 5 ML/day, as measured at the Tantawangalo Creek gauge (219006) at Tantawangalo Mountain (Dam); or
 - (ii) the daily flow minus 2.0 ML/day, as measured at the Tantawangalo Creek gauge (219006) at Tantawangalo Mountain (Dam).

67 Access rules for the taking of water from these alluvial sediments

- (1) This clause applies to the taking of water under an access licence from these alluvial sediments, excluding the taking of water under an access licence that nominates an aquifer interference approval and access licences with a share component which specifies the Bega and Brogo Regulated Rivers Water Source.
- (2) Subject to subclauses (5), (8) and (10), the taking of water under an aquifer access licence is subject to the same access rules under clause 65 as those for an unregulated river access licence in the same water source or management zone.
- (3) Subject to subclauses (5), (6), (7) and (8), the taking of water under a domestic and stock access licence is subject to the same access rules under clause 65 as those for a domestic and stock access licence in the same water source or management zone.
- (4) Subject to subclauses (5) and (10), the taking of water under a local water utility access licence is subject to the same access rules under clause 65 as those for an unregulated river access licence in the same water source or management zone.

- (5) Access licences to which subclauses (2), (3) and (4) apply are not subject to access rules that require a visible flow in the water source at the location at which water is proposed to be taken.
- (6) Subclause (3) does not apply to the taking of water for domestic consumption only under domestic and stock access licences or domestic and stock (subcategory "domestic") access licences that existed at the commencement of this Plan, for the first 3 years of this Plan.
- (7) Subclause (3) does not apply to the taking of water for stock watering only under a domestic and stock access licence or a domestic and stock (subcategory "stock") access licence that existed at the commencement of this Plan, for the first 3 years of this Plan, provided the volume of water taken does not exceed 14 litres per hectare of grazeable area per day.
- (8) Subclauses (2) and (3) do not apply to the taking of water under an access licence to which clause 1 of Schedule 4 applies, for any of the purposes listed below, provided that 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 (9):
 - (a) fruit washing;
 - (b) cleaning of dairy plant and equipment for the purpose of hygiene;
 - (c) poultry watering and misting; or
 - (d) cleaning of enclosures used for intensive animal production for the purposes of hygiene.
- (9) The Minister may amend a water supply work approval to reduce the maximum daily volume limit imposed by the rule under subclause (8), if the Minister is satisfied that the reduced volume is satisfactory to meet the purpose referred to in subclause (8).
- (10) Subclauses (2) and (4) do not apply to those local water utility access licences or aquifer (subcategory "town water supply") access licences to which clause 2 of Schedule 4 applies.

68 Total daily extraction limits

- (1) This Plan establishes total daily extraction limits (hereafter *TDELs*) in the water sources to which this Division applies, as follows:
 - (a) in the Upper Bega / Bemboka Rivers Water Source:
 - (i) 30 ML/day in A Class for all access licences; and
 - (ii) 62 ML/day in B Class for all access licences;
 - (b) in the Mid Bega River Sands Water Source:
 - (i) 12 ML/day in Low Flow Class for all access licences;
 - (ii) 12 ML/day in A1 Class for all access licences;
 - (iii) 18.85 ML/day in A2 Class for all access licences; and
 - (iv) 37.45 ML/day in B Class for all access licences.
- (2) The TDEL for each flow class specified in subclause (1) applies to all rivers within the water sources specified in subclause (1) apart from those rivers identified as minor streams in a harvestable right order made under section 54 of the Act.

Notes.

- 1 TDELs are an assessment tool only and will be used by the NSW Office of Water to determine which access licences (if any) may require individual daily extraction limits. However, continued exceedence of a TDEL may result in the imposition of individual daily extraction limits under clause 70.
- 2 Part 13 of this Plan allows for amendments to be made to establish TDELs.

69 Initial assignment of TDELs to categories of access licences

This Plan initially assigns TDELs to categories of access licences in these water sources as follows:

- (a) in the Upper Bega / Bemboka Rivers Water Source:
 - (i) for A Class:

- (1) 0.2 ML/day for domestic and stock access licences;
- (2) 0.2 ML/day for local water utility access licences; and
- (3) 29.60 ML/day for unregulated river access licences; and
- (ii) for B Class:
 - (1) 0.2 ML/day for domestic and stock access licences;
 - (2) 0.2 ML/day for local water utility access licences; and
 - (3) 61.60 ML/day for unregulated river access licences;
- (b) in the Mid Bega River Sands Water Source:
 - (i) for Low Flow Class:
 - (1) 0.15 ML/day for domestic and stock access licences;
 - (2) 4.7 ML/day for local water utility access licences;
 - (3) 5.79 ML/day for unregulated river access licences; and
 - (4) 1.36 ML/day for aquifer access licences;
 - (ii) for A1 Class:
 - (1) 0.15 ML/day for domestic and stock access licences;
 - (2) 4.7 ML/day for local water utility access licences;
 - (3) 5.79 ML/day for unregulated river access licences; and
 - (4) 1.36 ML/day for aquifer access licences;
 - (iii) for A2 Class:
 - (1) 0.15 ML/day for domestic and stock access licences;
 - (2) 6.7 ML/day for local water utility access licences;

- (3) 9.72 ML/day for unregulated river access licences; and
- (4) 2.28 ML/day for aquifer access licences; and
- (iv) for B Class:
 - (1) 0.15 ML/day for domestic and stock access licences;
 - (2) 12.8 ML/day for local water utility access licences;
 - (3) 19.85 ML/day for unregulated river access licences; and
 - (4) 4.65 ML/day for aquifer access licences.

Note. Part 13 of this Plan allows for amendments to be made to assign TDELs.

70 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) In the Upper Bega / Bemboka Rivers Water Source and the Mid Bega River Sands Water Source, if in the Minister's opinion:
 - (a) a holder of an access licence is not conforming to rostering arrangements established by the Bega Valley Water Users Association and approved by the Minister; or
 - (b) a holder of an access licence does not want to participate in rostering arrangements established by the Bega Valley Water Users Association and approved by the Minister and has confirmed this in writing to the Minister;

then the Minister may amend the extraction component of the access licence under section 68A of the Act to impose an IDEL.

- (3) The IDEL assigned under subclause (2) is to be in the same proportion that the share component for the access licence is to the share components of all access licences of that category in the respective water source.
- (4) Where an IDEL has been assigned to an access licence under subclause (2), that IDEL

may be later removed from the access licence by the Minister at the written request of the access licence holder subject to the Minister being satisfied that the access licence holder will participate in rostering arrangements established by the Bega Valley Water Users Association and approved by the Minister.

- (5) If the Minister is satisfied that an assessment of daily extraction under access licences for which a TDEL is established and assigned under clauses 68 and 69 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 13 of this Plan allows for amendments to be made to establish and remove IDELs.

Part 10 Rules for water supply work approvals

Note. This Part is made in accordance with sections 5, 21 and 95 of the Act. Part 13 allows for amendments to be made to Part 10.

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

71 General

The rules in this Division apply to water supply work approvals for water supply works that may be used to take water:

- (a) occurring naturally on the surface of the ground shown on the Registered Map; and
- (b) in rivers, lakes, estuaries and wetlands in these water sources.

Note. The rules in this Division apply to all water supply works except those water supply works that may be used to take water from these alluvial sediments and any alluvial sediments within the Bega and Brogo Regulated Rivers Water Source.

72 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 third order or higher streams within the Upper Brogo River Water Source or within the Lower Estuary Management Zone of the Bega River Estuary and Tributaries 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 principles of the Act.
- 2 **Stream order** and **in-river dam** are defined in the Dictionary.
- (2) A water supply work approval must not be granted or amended to authorise a runoff harvesting dam which, in the Minister's opinion, has a capacity that exceeds the volume of the share component of the access licences that nominate the dam.

Note. *Runoff harvesting dam* is defined in the Dictionary.

(3) A water supply work approval must not be granted for a water supply work in the Upper Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source.

Note. Part 13 allows for amendments to be made to clause 72.

Division 2 Rules applying to water supply works that take groundwater

73 General

- (1) The rules in this Division apply only to water supply works that may be used to take water from these alluvial sediments and any alluvial sediments that are within the Bega and Brogo Regulated Rivers Water Source.
- (2) In this Division, a reference to a water supply work is limited to a water supply work that may be used to take water from these alluvial sediments and any alluvial sediments that are within the Bega and Brogo Regulated Rivers Water Source.

74 Granting or amending water supply work approvals

- (1) Subject to subclause (2), a water supply work approval must not be granted for a water supply work being used to take water in the Upper Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source.
- (2) Subclause (1) does not apply to water supply works used solely to take water pursuant to basic landholder rights.

75 Rules for amending water supply work approvals for replacement groundwater works

- (1) The Minister may amend a water supply work approval to alter the work to which the approval relates if the Minister is satisfied that the amendment is to authorise a replacement groundwater work.
- (2) For the purposes of this Plan, *replacement groundwater work* means a water supply work that replaces an existing water supply work constructed and used for the purpose of taking water from an aquifer where:

- (a) the existing water supply work is the subject of a water supply work approval under the Act;
- (b) the replacement groundwater work is to be constructed to extract water from the same water source as the existing water supply work;
- (c) the replacement groundwater work is to be constructed to extract water from:
 - (i) the same depth as the existing water supply work; or
 - (ii) a different depth specified by the Minister if the Minister is satisfied that doing so will result in no greater impact on a water source or its dependent ecosystems;
- (d) the replacement groundwater work is to be located within:
 - (i) 20 metres of the existing water supply work; or
 - (ii) a distance greater than 20 metres of the existing water supply work if the Minister is satisfied that doing so will result in no greater impact on a water source or its dependent ecosystems;
- (e) if the existing water supply work is located within 40 metres of the high bank of a river, the replacement groundwater work is to be located:
 - (i) within 20 metres of the existing water supply work but no closer to the high bank of the river; or
 - (ii) more than 20 metres from the existing water supply work, but no closer to the high bank of the river, if the Minister is satisfied that doing so will result in no greater impact on a water source or its dependent ecosystems;
- (f) the replacement groundwater work must not have a greater internal diameter or excavation footprint than the existing water supply work, except where the internal diameter of the casing of the existing water supply work is no longer manufactured, in which case the internal diameter of the replacement groundwater work is to be no greater than 110% of the internal diameter of the existing water supply work it replaces; and

- (g) for the purposes of paragraph (f), *internal diameter* means the diameter of the inside of the casing of the water supply work which is a water bore and *excavation footprint* means the authorised dimensions of a water supply work which is an unlined excavation constructed for the purposes of water supply only.
- (3) For the purposes of subclause (2) (c) (ii), the Minister may require the applicant to submit a hydrogeological study, assessed as adequate by the Minister, to demonstrate that the construction of the work at a different depth to the existing water supply work will result in no greater impact on a water source or its dependent ecosystems.
- (4) For the purposes of subclauses (2) (d) (ii) or (2) (e) (ii), the Minister may require the applicant to submit a hydrogeological study, assessed as adequate by the Minister, to demonstrate that the location of the work at a greater distance than 20 metres from the existing water supply work will result in no greater impact on a water source or its dependent ecosystems.

Notes.

- 1 The Minister may amend an approval on the application of the holder of the approval, under section 107 of the Act. The operation of section 107 (3) of the Act may further restrict the replacement of an existing water supply work.
- 2 Part 13 allows for amendments to be made to clause 75.

76 Rules to minimise interference between water supply works

- (1) A water supply work approval must not be granted or amended to authorise the construction of a water supply work which, in the Minister's opinion, is located within:
 - (a) 100 metres of a water supply work authorised to take water from the same water source that is nominated by another access licence on another landholding;
 - (b) 100 metres of a water supply work authorised to take water from the same water source pursuant to basic landholder rights on another landholding;
 - (c) 50 metres from the boundary of the land on which the work is located, unless the landholder of the land adjoining the boundary has provided consent in writing;

- (d) 500 metres of a water supply work authorised to take water from the same water source by a local water utility or a major utility, unless the local water utility or major utility has provided consent in writing; or
- (e) 100 metres of a NSW Office of Water observation or monitoring bore, unless the Minister has provided consent in writing.
- (2) The distance restrictions specified in subclause (1) do not apply to the grant or amendment of a water supply work approval if the Minister is satisfied that:
 - (a) the water supply work is solely for basic landholder rights;
 - (b) the water supply work is a replacement groundwater work;
 - (c) the water supply work is for the purpose of monitoring, environmental management or remedial works;
 - (d) the location of the water supply work would result in no more than minimal impact on existing extractions within these water sources; or
 - (e) a hydrogeological study, submitted by the applicant and assessed as adequate by the Minister, demonstrates that the location of the work at a lesser distance will have no more than minimal impact on existing extraction from the water source.
- (3) An approval granted under subclause (2) (e) must be subject to a requirement that, when directed by the Minister by notice in writing, the approval holder must carry out all actions required by the Minister and specified in the notice to minimise the impact of the water supply work on existing water levels or extraction, if the Minister is satisfied that the location of the water supply work is causing more than minimal impact on existing water levels or extraction.

Note. Part 13 allows for amendments to be made to clause 76.

77 Rules for water supply works located near contamination sources

- (1) A water supply work approval must not be granted or amended to authorise the construction of a water supply work which, in the Minister's opinion, is located:
 - (a) within 250 metres of the plume associated with a contamination source listed in

Schedule 5;

- (b) between 250 metres and 500 metres of the plume associated with a contamination source listed in Schedule 5, unless the Minister is satisfied that no drawdown of water will occur within 250 metres of the plume associated with the contamination source; or
- (c) at a distance specified by the Minister that is more than 500 metres from the plume associated with a contamination source listed in Schedule 5, if a greater distance is determined by the Minister to be necessary to protect the water source, the environment or public health or safety.
- (2) The distance restrictions specified in subclause (1) in relation to the grant or amendment of a water supply work approval do not apply if the Minister is satisfied:
 - (a) that the distance is adequate to protect the water source, its dependent ecosystems, and public health and safety; or
 - (b) the water supply work is for the purpose of monitoring, environmental management or remedial works.

78 Rules for water supply works located near sensitive environmental areas

- (1) A water supply work approval must not be granted or amended to authorise the construction of a water supply work which, in the Minister's opinion, is located:
 - (a) within 100 metres of a high priority groundwater dependent ecosystem listed in Schedule 6 in the case of a water supply work used solely to take water pursuant to basic landholder rights;
 - (b) within 200 metres of a high priority groundwater dependent ecosystem listed in Schedule 6 for water supply works not used solely to take water pursuant to basic landholder rights, unless paragraph (c) applies;
 - (c) at a distance specified by the Minister that is more than 200 metres of a high priority groundwater dependent ecosystem listed in Schedule 6, excluding water supply works used solely to take water pursuant to basic landholder rights, if the

Minister is satisfied that the water supply work is likely to cause drawdown at the perimeter of any groundwater dependent ecosystem listed in Schedule 6; or

- (d) within 40 metres of the top of the high bank of a river.
- (2) The distance restrictions specified in subclause (1) (a), (b) and (c) in relation to the grant or amendment of a water supply work approval do not apply if the Minister is satisfied that no drawdown of water will occur at the perimeter of any groundwater dependent ecosystem in Schedule 6.
- (3) The distance restrictions specified in subclause (1) in relation to the grant or amendment of a water supply work approval do not apply if the Minister is satisfied that:
 - (a) the water supply work is for the purpose of monitoring, environmental management or remedial works;
 - (b) the water supply work replaces an existing water supply work that is part of a bore network for a major utility or a local water utility for the purpose of town water supply;
 - (c) the water supply work is a replacement groundwater work; or
 - (d) the location of the water supply work at a lesser distance would result in no greater impact on these water sources and their dependent groundwater ecosystems.

Note. Part 13 allows for amendments to be made to clause 78.

79 Rules for water supply works located near groundwater dependent culturally significant sites

- (1) A water supply work approval must not be granted or amended to authorise the construction of a water supply work which, in the Minister's opinion, is located within:
 - (a) 100 metres of a groundwater dependent culturally significant site in the case of a water supply work used solely to take water pursuant to basic landholder rights; or

- (b) 200 metres of a groundwater dependent culturally significant site in the case of a water supply work not used solely to take water pursuant to basic landholder rights.
- (2) The distance restrictions specified in subclause (1) in relation to the grant or amendment of a water supply work approval do not apply if the Minister is satisfied that:
 - (a) the water supply work is for the purpose of monitoring, environmental management or remedial works;
 - (b) the water supply work replaces an existing water supply work that is part of a bore network for a major utility or a local water utility for the purpose of town water supply;
 - (c) the water supply work is sealed off to the nearest impervious layer above the slotted intervals of the work with an impermeable seal constructed between the casing and the bore hole in accordance with any requirements specified by the Minister;
 - (d) the water supply work is a replacement groundwater work; or
 - (e) the location of the water supply work at a lesser distance would result in no greater impact on these water sources and their groundwater dependent culturally significant sites.

Note. Culturally significant sites will be identified as a part of the assessment undertaken by the NSW Office of Water during the processing of an application for the granting or amending of a water supply work approval.

80 Rules for the use of water supply works located within restricted distances

- (1) Subject to subclauses (2) and (3), a water supply work that is located within a restricted distance specified in clauses 76 79 must not, in any water year, be used to take more water than the volume of water that is equal to the sum of the share components of the access licences nominating that water supply work at the commencement of this Plan.
- (2) Subject to subclause (3), a water supply work that becomes located within a restricted

distance specified in clauses 76 - 79, as a result of an amendment to this Plan must not, in any water year, be used to take more water than the volume of water that is equal to the sum of share components of access licences nominating that water supply work at the date of the amendment.

(3) Subclauses (1) and (2) do not apply where a restricted distance does not apply in accordance with clause 76 (2), 77 (2), 78 (2) and (3) or 79 (2).

Note. The water quality from any bore can be affected by land use activities and inherent water quality in the aquifer. Water quality cannot be guaranteed and may be unsuitable for human consumption and other uses. The quality of water extracted should be tested before being used and appropriately treated. Such testing and treatment is the responsibility of the licence holder.

Note. Part 13 allows for amendments to be made to clause 80.

Part 11 Access licence dealing rules

81 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.

82 Conversion of access licence to new category

- (1) This clause relates to dealings under section 710 of the Act in these water sources.
- (2) Dealings under section 710 of the Act are prohibited unless the conversion is from:
 - (a) an unregulated river access licence to an aquifer access licence;
 - (b) an unregulated river access licence to an unregulated river (high flow) access licence in the following water sources and management zones:
 - (i) Mid Bega River Tributaries Water Source;
 - (ii) Mid Bega River Sands Water Source;
 - (iii) Upper Bega / Bemboka Rivers Water Source;
 - (iv) Upper Bega / Bemboka Rivers Tributaries Water Source;
 - (v) Candelo Creek Water Source;
 - (vi) Sandy Creek Water Source;
 - (vii) Lower Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source;

- (viii) Lower Bega / Lower Brogo Rivers Tributaries Water Source; and
- (ix) Wolumla Creek Water Source;
- (c) a regulated river (general security) access licence to a regulated river (high security) access licence; or
- (d) a regulated river (high security) access licence to a regulated river (general security) access licence.
- (3) A dealing under subclause (2) (a) is subject to the share component of the aquifer access licence being equal to the share component of the unregulated river access licence.
- (4) A dealing under subclause (2) (b) is subject to:
 - (a) the share component of the unregulated river (high flow) access licence being3.0 times the share component of the unregulated river access licence; and
 - (b) except as provided under subclause (5), the total amount of unregulated river access licence share component being converted to unregulated river (high flow) access licence not exceeding:
 - (i) 58 unit shares in the Mid Bega River Tributaries Water Source;
 - (ii) 248 unit shares in the Mid Bega River Sands Water Source;
 - (iii) 1,650 unit shares in the Upper Bega / Bemboka River Water Source;
 - (iv) 278 unit shares in the Upper Bega / Bemboka Rivers Tributaries Water Source;
 - (v) 87 unit shares in the Candelo Creek Water Source;
 - (vi) 104 unit shares in the Sandy Creek Water Source;
 - (vii) 591 unit shares in the Tantawangalo Creek Water Source;
 - (viii) 135 unit shares in the Lower Bega / Lower Brogo Rivers Tributaries

Water Source; and

(ix) 174 unit shares in the Wolumla Creek Water Source;

minus any share components of access licences granted under clause 54 and granted under the Regulation since the commencement of the Plan in the respective water source.

- (5) The Minister may, after year five of this Plan, permit the total amount of unregulated river access licence share component that can be converted to unregulated river (high flow) access licence under subclause (4) to increase to:
 - (a) 458 unit shares in the Mid Bega River Sands Water Source;
 - (b) 2,560 unit shares in the Upper Bega / Bemboka River Water Source;
 - (c) 417 unit shares in the Upper Bega / Bemboka Rivers Tributaries Water Source;
 - (d) 148 unit shares in the Candelo Creek Water Source;
 - (e) 156 unit shares in the Sandy Creek Water Source;
 - (f) 973 unit shares in the Tantawangalo Creek Water Source;
 - (g) 288 unit shares in the Lower Bega / Lower Brogo Rivers Tributaries Water Source; and
 - (h) 260 unit shares in the Wolumla Creek Water Source;

minus any share components of access licences granted under clause 54 and granted under the Regulation since the commencement of the Plan in the respective water source.

- (6) Dealings under subclause (2) (c) are subject to:
 - (a) the application of a conversion factor established by the Minister and published in an Order made under section 71Z of the Act that protects the environmental water, domestic and stock rights, native title rights and the reliability of supply to all other access licences in this water source; and

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Note. Assessments indicate that a conversion factor of 3:1 should be used, which would result in 1 megalitre of regulated river (high security) access licence or aquifer access licence share component resulting from conversion of 3 megalitres of regulated river (general security) access licence share component.

(b) the volume of water in the regulated river (general security) access licence water allocation account being equal to or greater than its share component volume.

Note. The volume of water in the regulated river (general security) access licence water allocation account which is in excess of the share component volume of the new regulated river (high security) access licence or aquifer access licence will not be credited to the new regulated river (high security) or aquifer access licence water allocation account.

- (7) Dealings under subclause (2) (d) are subject to:
 - (a) the application of a conversion factor equal to one divided by the conversion factor established in subclause (6); and
 - (b) the total volume of regulated river (general security) access licence share components not increasing above the volume of regulated river (general security) access licence share components at the commencement of this Plan.

Note. This subclause would allow conversion of a regulated river (high security) and aquifer access licence to a regulated river (general security) access licence only if there had been a corresponding or larger volume of regulated river (general security) access licence share component converted to regulated river (high security) or aquifer access licence.

83 Assignment of rights dealings (within water sources)

- (1) This clause relates to dealings under section 71Q of the Act in these water sources.
- (2) Dealings under section 71Q of the Act are prohibited if the dealing involves an assignment of rights from:
 - (a) an unregulated river (high flow) access licence to an access licence of another category;
 - (b) a supplementary water access licence to an access licence of another category;
 - (c) an access licence with an extraction component that specifies one management zone in the Bega River Estuary and Tributaries Water Source to an access

licence with an extraction component that specifies another management zone in the Bega River Estuary and Tributaries Water Source; or

- (d) an access licence with an extraction component that specifies the Lower Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source to an access licence with an extraction component that specifies the Upper Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source.
- (3) Dealings under section 71Q of the Act are prohibited if the dealing involves an assignment of rights from:
 - (a) an access licence of another category to an unregulated river (high flow) access licence; or
 - (b) an access licence of another category to a supplementary water access licence.

84 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.

85 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 a management zone in the Bega River Estuary and Tributaries Water Source being varied to specify another management zone in the Bega River Estuary and Tributaries Water Source; or
 - (b) an access licence with an extraction component that specifies the Lower Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source being varied to specify the Upper Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source.

86 Assignment of water allocations 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 a management zone in the Bega River Estuary and Tributaries Water Source to an access licence with an extraction component that specifies another management zone in the Bega River Estuary and Tributaries Water Source;
 - (b) from an access licence with an extraction component that specifies the Lower Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source to an access licence with an extraction component that specifies the Upper Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source;
 - (c) from an unregulated river (high flow) access licence to an access licence of another category;
 - (d) from an access licence of another category to an unregulated river (high flow) access licence;
 - (e) from a supplementary water access licence to an access licence of another category; or
 - (f) from an access licence of another category to a supplementary water access licence.
- (3) Dealings between water sources under section 71T of the Act are prohibited.

87 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.

88 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 in these water sources if the dealing involves:
 - (a) an access licence which nominates a water supply work located in the Bega River Estuary and Tributaries Water Source being amended to nominate a water supply work located in another management zone in the Bega River Estuary and Tributaries Water Source; or
 - (b) an access licence which nominates a water supply work located in the Lower Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source being amended to nominate a water supply work located in the Upper Tantawangalo Creek Management Zone in the Tantawangalo Creek Water Source.

Part 12 Mandatory conditions

Division 1 Access licences

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

89 General

- (1) Access licences in these water sources must have mandatory conditions where required to give effect to the following:
 - (a) the relevant water allocation account management rules specified in Division 1 of Part 9 of this Plan for the respective category or subcategory of access licence;
 - (b) that water must not be taken under an access licence otherwise than in compliance with the conditions applying to the water supply work approval for the water supply work through which water is to be taken;
 - (c) that the holder of an access licence must keep a Logbook;
 - (d) that the holder of an access licence must record the following in the Logbook:
 - (i) each date on which water was taken under the access licence;
 - (ii) the volume of water taken on that date;
 - (iii) the water supply work approval number of the water supply work used to take the water on that date;
 - (iv) the purpose or purposes for which the water taken on that date was used;
 - (v) for domestic and stock access licences, local water utility access licences, unregulated river access licences, unregulated river (high flow) access licences, and aquifer access licences in these water sources, excluding the Bega and Brogo Regulated Rivers Water Source, the volume of water taken in the first three water years in which this Plan has effect, by comparison to the maximum volume of water permitted to be taken in

those years under clause 56 (2);

- (vi) for domestic and stock access licences, local water utility access licences, unregulated river access licences, unregulated river (high flow) access licences, and aquifer access licences in these water sources, excluding the Bega and Brogo Regulated Rivers Water Source, the volume of water taken in any three consecutive water years after the first water year in which this Plan has effect, by comparison to the maximum volume of water permitted to be taken in those years under clause 56 (3);
- (vii) for domestic and stock access licences, local water utility access licences, regulated river (high security) access licences, regulated river (general security) access licences and aquifer access licences in the Bega and Brogo Regulated Rivers Water Source only, the volume of water taken in any water year in which this Plan has effect, by comparison to the maximum volume of water permitted to be taken in that water year under clause 57 (2); and
- (viii) any other information required to be recorded in the Logbook under the rules of this Plan;
- (e) that the holder of an access licence must produce the Logbook to the Minister for inspection, when requested;
- (f) that the holder of an access licence must retain the information required to be recorded in the Logbook for 5 years from the date to which that information relates;
- (g) that the holder of an access licence must notify the Minister, in writing, immediately upon becoming aware of a breach of any condition of the licence; and
- (h) any other condition required to implement the provisions of this Plan.
- (2) All regulated river (general security) access licences must have mandatory conditions where required, to give effect to the rules in clause 61.

- (3) All supplementary water access licences must have mandatory conditions where required, to give effect to the rules in clause 62.
- (4) All access licences of the subcategory "Aboriginal cultural" must have a mandatory condition that specifies that water must only be taken under the access licence by Aboriginal persons or Aboriginal communities for personal, domestic or communal purposes, including drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, gathering and for recreational, cultural and ceremonial purposes.
- (5) An access licence for a project under Part 3A of the *Environmental Planning and Assessment Act 1979* must have mandatory conditions where required to give effect to the relevant access rules for the taking of water specified in Division 3 of Part 9 of this Plan.

Division 2 Water supply work approvals

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

90 General

- (1) Water supply work approvals for water supply works in these water sources must have mandatory conditions where required to give effect to the following:
 - (a) that the water supply work must not be used to take water under an access licence unless in compliance with the relevant access rules for the taking of surface water or the taking of water from these alluvial sediments as specified in Division 3 of Part 9 of this Plan;
 - (b) that 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 the *NSW Interim Water Meter Standards* (NSW Office of Water) as may be updated or replaced from

time to time;

- (iii) the metering equipment must be operated and maintained in a proper and efficient manner at all times;
- (iv) the metering equipment must be sited and installed at a place in the pipe, channel or conduit between the water source and the first discharge outlet. There must be no flow of water into or out of the pipe, channel or conduit between the water source and the metering equipment; and
- (v) any other requirements as to type, standard or other criteria for the metering equipment specified by the Minister by notice in writing;;

Note. The Minister may direct a landholder or person to install, replace or to properly maintain metering equipment under section 326 of the Act.

- (c) that the holder of a water supply work approval must keep a Logbook;
- (d) that the holder of a water supply work approval must record the following in the Logbook:
 - (i) each date on which water was taken using the water supply work;
 - (ii) the volume of water taken on that date;
 - (iii) the access licence 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 entitlement), the authority under which water was taken;
 - (iv) the purpose or purposes for which the water was taken on that date;
 - (v) details of any cropping carried out using the water taken through the water supply work including the type of crop, area cropped, and dates of planting and harvesting;
 - (vi) where metering equipment has been installed for use in connection with the water supply work, the meter reading before water is taken;

- (vii) where metering equipment has not been installed for use in connection with the water supply work, details of all pumping activities for the water supply work including pump running hours, pump power usage or pump fuel usage, pump start and stop times, and pump capacity per unit of time; and
- (viii) any other information required to be recorded in the Logbook under the rules of this Plan;
- (e) that the holder of a water supply work approval must produce the Logbook to the Minister for inspection, when requested;
- (f) that the holder of a water supply work approval must retain the information required to be recorded in the Logbook for 5 years from the date to which that information relates;
- (g) for all water supply works except those taking water from these alluvial sediments and any alluvial sediments within the Bega and Brogo Regulated Rivers Water Source, 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 cease to take conditions do not apply and records that confirmation, and the means of confirmation (such as visual inspection or internet search), in the Logbook. In this paragraph *cease to take conditions* means any condition on the water supply work approval, or on the access licence under which water is proposed to be taken, that prohibits the taking of water in a particular circumstance; and
- (h) any other conditions required to implement the provisions of this Plan.
- (2) The water supply work approval for Cochrane Dam and Brogo Dam must have mandatory conditions where required to give effect to the relevant system operation rules in Part 6 of this Plan.
- (3) A water supply work approval for a runoff harvesting dam must have a mandatory condition which provides that the capacity of the dam must be no greater than the volume of the share components of the access licences that nominate the dam.

(4) A water supply work approval for a replacement groundwater work must have mandatory conditions to give effect to the requirements for a replacement groundwater work specified in, or specified by the Minister in accordance with, clause 75.

91 Water supply works used to take groundwater

- (1) This clause applies to all water supply work approvals for water supply works that may be used to take water contained within these alluvial sediments including any alluvial sediments in the Bega and Brogo Regulated Rivers Water Source. This clause does not apply to water supply work approvals for excavations up to 3 metres in depth in the Mid Bega River Sands Water Source.
- (2) Water supply work approvals to which this clause applies must have mandatory conditions where required to give effect to the following:
 - (a) the rules for limiting the taking of water within the distance restrictions as specified in clause 80;
 - (b) the construction of a new water supply work must:
 - (i) comply with the distance restrictions specified in, or specified by the Minister in accordance with, clauses 76 - 79;

Note. If the work has been exempted by the Minister from one or more distance restrictions specified in Division 2 of Part 10 of this Plan, then the approval holder must be able to demonstrate the basis for that exemption, for example if the exemption refers to a hydrogeological study which demonstrates that the location of the work will have no more than minimal impact to the satisfaction of the Minister, then evidence must be able to be provided to that effect.

- (ii) comply with the construction standards prescribed for the relevant type of bore in the *Minimum Construction Requirements for Water Bores in Australia*, 2003, ISBN 1 9209 2009 9, as may be amended from time to time, or any standards which supersede those standards; and
- (iii) prevent contamination between aquifers through appropriate construction;
- (c) the approval holder must ensure that if the water supply work is abandoned or replaced that it is decommissioned in compliance with the "minimum

requirements for decommissioning bores" prescribed in the *Minimum Construction Requirements for Water Bores in Australia*, 2003, ISBN 1 9209 2009 9, as amended or replaced from time to time, unless otherwise directed by the Minister in writing;

- (d) within two months of the decommissioning of the water supply work, the approval holder must notify the Minister in writing that the work has been decommissioned;
- (e) the approval holder must, within two months of completion of the construction of the water supply work, or within two months after the issue of the approval if the work is existing, submit to the NSW Office of Water the approved form completed with all relevant details, including:
 - (i) the name and licence number of the driller who constructed the bore;
 - (ii) the details of geology and construction on the approved form;
 - (iii) details of the location of the work on a copy of the lot and deposited plan of the land, its geographical reference accurate to \pm 5 metres, and the respective distance(s) of the work from the property boundaries; and
 - (iv) if the Minister has requested any water analysis and/or pumping tests to be carried out, details of the water analysis and/or pumping tests required by the Minister;
- (f) if, during the construction of the work, saline or contaminated water is encountered above the production aquifer, the approval holder must:
 - (i) notify the Minister within 48 hours of becoming aware of the contaminated water;
 - (ii) take all reasonable steps to minimise contamination and environmental harm;
 - (iii) ensure that such water is sealed off by inserting casing to a depth sufficient to exclude the saline or contaminated water from the work, and,

if specified by the Minister, placing an impermeable seal between the casing(s) and the walls of the work from the bottom of the casing to ground level as specified by the Minister; and

- (iv) if the Minister has specified any other requirements, comply with any requirements specified by the Minister in writing;
- (g) when directed by the Minister by notice in writing, the approval holder must provide a report in the form specified in the notice detailing the quality of any water obtained using the water supply work;
- (h) that the water supply work approval lapses if the construction of the water supply work is not completed within three years of the issue of the water supply work approval; and
- (i) any other conditions required to implement the provisions of this Plan.
- (3) A water supply work approval granted under clause 76 (2) (e), must have a mandatory condition to give effect to clause 76 (3).
- Note. Part 13 of this Plan allows for amendments to be made to clause 91.

Part 13 Amendment of this Plan

92 General

- (1) Amendments specified throughout this Plan, and in this Part, are amendments authorised by this Plan.
- (2) 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.

93 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 thereof included in this Plan) or remove an existing water source or water management area (including part thereof);
- (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; and
- (d) amend the Registered Map.

94 Part 6

After year 9 of this Plan, Part 6 may be amended to establish an environmental contingency allowance (hereafter *ECA*) of up to 500 ML/year to be set aside in Brogo Dam water storage for, but not limited to, the following purposes:

(a) to assist in the management of critical environmental events, such as algal blooms and chemical spills; and

(b) to maintain aquatic ecosystem health.

95 Part 9

- (1) Division 1 of Part 9 may be amended to do any of the following:
 - (a) amend clause 57 to permit water allocations remaining in water allocation accounts of regulated river (general security) access licences to be carried over from one water year to the next once the total volume of water extracted by regulated river (general security) access licences in a single water year exceeds an amount equivalent to 0.75 ML per unit share of their access licence share component;
 - (b) an amendment made under paragraph (a) is limited such that the maximum amount of water allocation that may be carried over from one water year to the next does not exceed 0.1 ML per unit share of access licence share component; and
 - (c) following an amendment under paragraph (a), amend clause 57 to establish rules for the debiting of water allocation accounts of regulated river (general security) access licences when water is spilled from Brogo Dam.
- (2) Clauses 61 (4) and 62 (2) (g) may be amended to allow the 50% of the uncontrolled flow event to be protected to be calculated on a daily basis or to be calculated as a forecast event volume over certain thresholds.
- (3) Division 3 of Part 9 of this Plan may be amended to do any of the following:
 - (a) amend the top of the Very Low Flow Class and the bottom of A Class for the following water sources, following field verification to ensure that the top of the Very Low Flow Class and the bottom of A Class correlate to a visible flow at the end of the system:
 - (i) Candelo Creek Water Source;
 - (ii) Sandy Creek Water Source;
 - (iii) Lower Tantawangalo Creek Management Zone of the Tantawangalo

Creek Water Source; and

- (iv) Wolumla Creek Water Source;
- (b) amend the top of the Very Low Flow Class and the bottom of A Class for the following water sources, following field verification to ensure that the top of the Very Low Flow Class and the bottom of A Class correlate to a visible flow at the end of Double Creek:
 - (i) Mid Bega River Tributaries Water Source;
 - (ii) Upper Bega / Bemboka Rivers Tributaries Water Source; and
 - (iii) Lower Bega / Lower Brogo Rivers Tributaries Water Source;
- (c) any amendment made under paragraphs (a) and (b) should result in the top of the Very Low Flow Class and bottom of A Class being within the following range for the:
 - (i) Candelo Creek Water Source: between 1.5 and 4.5 ML/day at the Yurammie gauge (219034) on Candelo Creek;
 - (ii) Sandy Creek Water Source: between 1.5 and 4.5 ML/day at the Yurammie gauge (219034) on Candelo Creek;
 - (iii) Lower Tantawangalo Creek Management Zone of the Tantawangalo Creek Water Source: between 1 and 7 ML/day at the Candelo dam site gauge (219022) on Tantawangalo Creek;
 - (iv) Wolumla Creek Water Source: between 1.5 and 4.5 ML/day at the Yurammie gauge (219034) on Candelo Creek;
 - Mid Bega River Tributaries Water Source: between 1 and 3 ML/day at the Double Creek gauge (219017) in the Lower Bega / Lower Brogo Rivers Tributaries Water Source;
 - (vi) Upper Bega / Bemboka Rivers Tributaries Water Source: between 1 and 3 ML/day at the Double Creek gauge (219017) in the Lower Bega /

Lower Brogo Rivers Tributaries Water Source; and

- (vii) Lower Bega / Lower Brogo Rivers Tributaries Water Source: between 1 and 3 ML/day at the Double Creek gauge (219017);
- (d) amend the top of the Very Low Flow Class and the bottom of the Low Flow Class for the Upper Bega / Bemboka Rivers Water Source to specify a flow of up to 5 ML/day at the flow reference point if local water utility requirements cannot be met because of changes in the frequency of inflows to the Mid Bega River Sands Water Source;
- (e) amend the flow classes in Table B in clause 64 to merge the Low Flow Class with A Class if all access licences in the water source have been accredited under clause 65 (5);
- (f) establish a new or additional flow class or 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 93;
- (g) add, remove or modify the reference point for these water sources or management zones;
- (h) add, remove or modify the description of flows at the reference point for these water sources or management zones as a result of an amendment under paragraph (g);
- (i) add, remove or modify the commencement date for a flow class;
- (j) add. remove or modify the water sources or management zones to which these flow classes apply;
- (k) amend clause 65 to:
 - (i) specify alternate access rules for lagoons, lakes, in-river pools and other lentic water features; and/or
 - (ii) specify new access rules following an amendment under paragraph (e);

- amend clause 66 to specify equivalent flows at a flow reference point at the Tantawangalo weir;
- (m) amend clause 67 to require access licences, excluding access licences specified in clause 67 (6), (7), (8) and (10), that nominate a water supply work that may be used to take water from particular areas in these alluvial sediments located more than 40 metres from the top of the high bank of a river, to be subject to the same access rules as unregulated river access licences for the corresponding water source or management zone specified in clause 65 of this Plan but with a delay as to when water may be taken;
- (n) amend clause 67 to require access licences, excluding access licences specified in clause 67 (6), (7), (8) and (10), that nominate a water supply work that may be used to take water from areas in these alluvial sediments and that are located within 40 metres or less from the top of the high bank of a river to be subject to access rules that refer to a visible flow in the water source at the location at which water is proposed to be taken. For the purposes of this amendment, a visible flow at the pump site is taken to mean a visible flow in the river immediately adjacent to the water supply work being used to take water from the alluvial sediments;
- (o) 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;
- (p) establish or assign new TDELs in these water sources or management zones to protect a proportion of flow within each flow class for the environment;
- (q) amend or remove TDELs if TDELs have been established or assigned under paragraphs (o) and/or (p);
- (r) from year 6 of this Plan, establish or assign new TDELs, amend or remove TDELs, establish, assign and later remove IDELs where licences have been accredited under clause 65 (5);

- (s) establish or assign new TDELs, amend or remove TDELs, establish, assign and later remove IDELs following an amendment under paragraph (e);
- (t) include rules for the establishment, assignment and removal of IDELs if IDELs are to be imposed on licences under clause 70 (5);
- (u) amend clause 65 to remove the existing access rules where TDELs and/or IDELs have been established under paragraphs (p) and/or (t) to protect a proportion of flow within each flow class for the environment;
- (v) amend clause 65 to reinstate access rules that applied at the commencement of this Plan, where TDELs and IDELs have been removed under paragraphs (s) and/or (t);
- (w) amend clauses 65 and 67 to modify the volume of water permitted to be taken for stock watering purposes; and/or
- (x) amend clause 70 to establish rules which will allow for:
 - (i) IDELs to be expressed as a share of the daily flow; and
 - (ii) daily flows to be shared in proportion to those shares established under paragraph (h).

96 Part 10

Part 10 may be amended to do any of the following:

- (a) amend clause 72 (1) to specify additional water sources or management zones or amend the water sources or management zones where water supply work approvals must not be granted and amended to authorise an in-river dam on third order or higher streams;
- (b) amend the definition of a replacement groundwater work in clause 75;
- (c) add, remove or modify a restricted distance specified in:
 - (i) clause 76 after year 5 of this Plan; or

- (ii) clause 78 based on the outcomes of further studies of groundwater ecosystem dependency that have been assessed as adequate by the Minister; and
- (d) amend clause 80 to impose further restrictions on the rate and timing of extraction of water from the respective water source to mitigate impacts.

97 Part 12

Clause 91 may be amended to specify different standards for decommissioning water supply works or construction requirements for water supply works.

98 Schedules

- (1) Schedule 1 may be amended to add, modify and/or remove a definition.
- (2) Schedule 2 may be amended to do any of the following:
 - (a) remove an access licence or entitlement from Column 1 of Schedule 2, remove the corresponding water source from Column 2 of Schedule 2 and to remove the corresponding access rule from Column 3 of Schedule 2;
 - (b) amend an access rule specified in Column 3; or
 - (c) add an access licence to Column 1 of Schedule 2, specify a water source in Column 2 of Schedule 2 and to specify an access rule in Column 3 of Schedule 2.
- (3) Schedule 3 may be amended to do any of the following:
 - (a) add a new access licence to clause 1 of Schedule 3, 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 covered in clause 65 (16) (a) and that purpose was specified on 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 unregulated river (subcategory "town water supply") access licence to clause 2 of Schedule 3, provided the

Minister is satisfied that the water supply system used to extract, 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 unregulated river (subcategory "town water supply") access licence or entitlement from Schedule 3 if:
 - (i) an access licence dealing results in the water being extracted under the licence being taken 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 access licence or entitlement from clause 2 of Schedule 3 if the Minister is satisfied that the water supply system used to extract, store and deliver water has undergone major augmentation since the commencement of this Plan;
- (e) add a new access licence to clause 3 of Schedule 3, provided that the Minister is satisfied that the access licence is for the purpose of power generation and that purpose was specified on, or referred to in the conditions of, the former *Water Act 1912* entitlement that the access licence replaced on commencement of this Plan; and/or
- (f) remove an access licence from clause 3 of Schedule 3.
- (4) Schedule 3 may be deleted if the Minister is satisfied that it is no longer required.
- (5) Schedule 4 may be amended to:
 - (a) add a new access licence to clause 1 of Schedule 4, 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 67 (8) 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;
 - (b) add a local water utility access licence or an aquifer (subcategory "town water

supply") access licence to clause 2 of Schedule 4, provided the Minister is satisfied that the water supply system used to extract, 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 aquifer (subcategory "town water supply") access licence or entitlement from clause 2 of Schedule 4 if the Minister is satisfied that the water supply system used to extract, store and deliver water has undergone major augmentation since the commencement of this Plan; or
- (d) remove an access licence or entitlement from Schedule 4 if:
 - (i) an access licence dealing results in the water being extracted under the licence being taken 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.
- (6) Schedule 4 may be deleted if the Minister is satisfied that it is no longer required.
- (7) Schedule 5 may be amended to add or remove a contamination source.
- (8) Schedule 6 may be amended to:
 - (a) add or remove a sensitive environmental area; or
 - (b) add a new high priority groundwater dependent ecosystem after year 5 of this Plan, or to remove a high priority groundwater dependent ecosystem.
- (9) Schedule 7 may be amended to:
 - (a) add or remove a river reach; or
 - (b) amend the definition of a river reach.

99 Other

(1) This Plan may be amended to provide for the management of floodplain harvesting

within these water sources.

- (2) This Plan may be amended to provide for the shepherding of water.
- (3) This Plan may be amended to include rules for 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.
- (4) This Plan may be amended to provide for the interception of runoff from land before it reaches a stream by plantations or other means.
- (5) This Plan may be amended to allow for the granting of aquifer interference approvals and the management of aquifer interference activities.
- (6) Consequential amendments may be made to this Plan as a result of an amendment to the Act or regulations.

Schedule 1 Dictionary

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

alluvial sediments means unconsolidated fluvio-lacustrine sediments.

assured inflows are the volumes of water which historic hydrologic information indicates are the minimum which can be expected to flow into this water source.

drawdown means a lowering of the level to which water will rise in cased bores. Natural drawdown may occur due to seasonal climatic changes. Groundwater pumping may also result in seasonal and long-term drawdown.

floodplain wetland means a lentic water source such as a swamp, bog or marsh where water levels do not experience a corresponding decrease when nearby river water levels decrease.

fractured rock means sedimentary, igneous and metamorphic rocks with fractures, joints, bedding planes and cavities in the rock mass that are capable of transmitting water.

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, manmade structures, mines or quarries), or other such surfaces that do not support grazing vegetation, such as water bodies and forested floors with no undergrowth.

groundwater dependent ecosystems includes ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater.

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.

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.

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.

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.

mangrove limit is as defined in the *DIPNR Survey of tidal limits and mangrove limits in NSW estuaries 1996 to 2003* (NSW Dept of Commerce, Manly Hydraulics Laboratory).

porous rock means consolidated sedimentary rock containing voids, pores or other openings (joints, cleats, fractures) which are interconnected, in the rock mass and are capable of transmitting water.

Registered Map for these water sources has the same meaning as in clause 4 (2) of this Plan.

reliability of supply means the frequency with which a given volume of water allocation is

available to be taken under an access licence, measures of which may include the long-term average annual allocation available to licence holders, the frequency with which full allocations allowed by this Plan are available and the frequency and sequencing of periods of low and zero allocation levels.

replacement groundwater work has the same meaning as in clause 75 (2) of this Plan.

reserves are volumes of water put aside in a water storage to allow the supply of future water allocations.

river reach is a section of this water source as defined in Schedule 7 of this Plan.

runoff harvesting dam has the same meaning as defined in the Access Licence Dealing Principles Order 2004.

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.

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

water year means a year commencing 1 July.

Schedule 2 Access licences with access rules for dam filling

This Schedule applies to each access licence which replaces a Water Act 1912 entitlement listed in Column 1 below.

Column 1	Column 2	Column 3
<i>Water Act 1912</i> entitlements from which access licences will be derived on commencement of this Plan	Water Source	Access rules
10SL055265	Lower Bega / Lower Brogo Rivers Tributaries	Water must not be taken for the purposes of dam filling when the flow in the Double Creek at the Double Creek near Brogo gauge (219017) is 10 ML/day or less.
10SL056563	Tantawangalo Creek Water Source	Water must not be taken for the purposes of dam filling when the flow in the Tantawangalo Creek at the Candelo Dam Site gauge (219002) is 85 ML/day or less.
10SL50272	Tantawangalo Creek Water Source	Water must not be taken for the purposes of dam filling when the flow in the Tantawangalo Creek at the Candelo Dam Site gauge (219002) is 25 ML/day or less.
10SL51426	Tantawangalo Creek Water Source	Water must not be taken for the purposes of dam filling when the flow in the Tantawangalo Creek at the Candelo Dam Site gauge (219002) is 25 ML/day or less.
10SL52181	Tantawangalo Creek Water	Water must not be taken for the

Column 1	Column 2	Column 3
<i>Water Act 1912</i> entitlements from which access licences will be derived on commencement of this Plan	Water Source	Access rules
	Source	purposes of dam filling when the flow in the Tantawangalo Creek at the Candelo Dam Site gauge (219002) is 25 ML/day or less.
10SL055316	Tantawangalo Creek Water Source	Water must not be taken for the purposes of dam filling when the flow in the Tantawangalo Creek at the Candelo Dam Site gauge (219002) is 25 ML/day or less.
10SL033852	Upper Bega / Bemboka River Tributaries Water Source	Water must not be taken for the purposes of dam filling when the flow in the Bega River at the Kanoona gauge (219032) is 65 ML/day or less.
10SL051883	Upper Bega / Bemboka River Tributaries Water Source	Water must not be taken for the purposes of dam filling when the flow in the Bega River at the Kanoona gauge (219032) is 65 ML/day or less.
10SL056155	Wolumla Creek Water Source	Water must not be taken for the purposes of dam filling when the flow in the Tantawangalo Creek at the Candelo Dam Site gauge (219002) is 100 ML/day or less.
10SL056615	Wolumla Creek Water Source	Water must not be taken for the purposes of dam filling when the flow in the Bega River at the Kanoona gauge (219032) is 5 ML/day or less.

Schedule 3 Access licences used to take surface water exempt from cease to pump rules

1 General

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

	<i>ct 1912</i> entitlements that will be replaced by access on commencement of this Plan
10	SL023744
10	SL028713
10	SL033499
10	SL034803
10	SL036861
10	SL038347
10	SL038357
10	SL038908
10	SL040285
10	SL041035
10	SL043914
10	SL044170
10	SL044297
10	SL046418
10	SL046771
10	SL047138
10	SL047197

<i>Water Act 1912</i> entit licences on commence	lements that will be replaced by access ement of this Plan
10SL050651	
10SL051352	
10SL051421	
10SL055125	
10SL055230	
10SL055251	
10SL055265	
10SL055471	
10SL055735	
10SL055759	
10SL055783	
10SL055788	
10SL055880	
10SL056155	
10SL056508	
10SL056571	
10SL056786	

2 Local water utility and unregulated river (subcategory "town water supply") access licences

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

Water Act 1912 entitlements that will be replaced by local water utility access licences or unregulated river (subcategory "town water supply") access licences on commencement of this Plan

10SL014767

10SL024007

3 Unregulated river access licences used for power generation

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

Water Act 1912 entitlements that will be replaced by unregulated river access licences on commencement of this Plan

10SL008283

10SL014029

Schedule 4 Access licences used to take water from the alluvial sediments exempt from cease to pump rules

1 General

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

	titlements that will be replaced by access accement of this Plan
10BL023392	
10BL162601	
10BL028458	
10BL106170	
10BL152381	
10BL164389	
10BL136417	
10BL023974	
10BL024407	
10BL116725	
10BL134503	
10BL601995	
10BL157859	
10BL159437	
10BL163579	
10BL013265	
10BL020208	

Water Act 1912 entitlements that will be replaced by access licences on commencement of this Plan

10BL155419

10BL161424

2 Local water utility and aquifer (subcategory "town water supply") access licences

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

Water Act 1912 entitlements that will be replaced by local water utility access licences or aquifer (subcategory "town water supply") access licences on commencement of this Plan

10BL110482 10BL110483 10BL110484

10BL110485

10BL110486

Schedule 5 Contamination sources in these water sources

Contamination sources in these water sources are the following:

- (a) on site sewage disposal systems or septic tanks;
- (b) any sites which have been declared to be significantly contaminated land under the *Contaminated Land Management Act 1997*;
- (c) any sites with a historical use that is listed in Table 1 of *Managing Land Contamination. Planning Guidelines SEPP 55 – Remediation of Land*; and
- (d) any sites listed in an agency database relating to contamination sources.

Schedule 6 High priority groundwater dependent ecosystems

At the commencement of this Plan, no high priority groundwater dependent ecosystems have been identified in this Schedule.

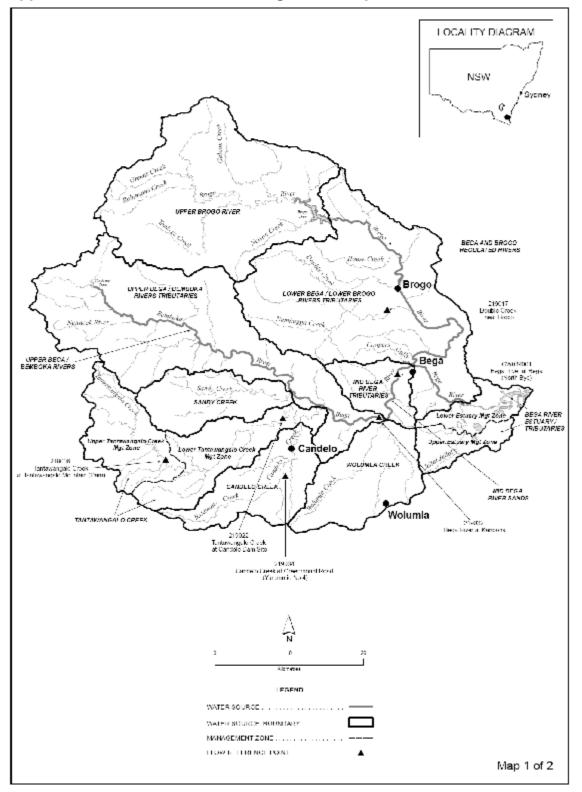
Note. High priority groundwater dependent ecosystems (*GDEs*) are currently under investigation and some of these may be identified during the term of this Plan. The full list of potential GDEs will be identified on the NSW Office of Water GDE Register and as a precautionary approach, will be considered by staff in the assessment of any works approval within the plan area. If verified as high priority groundwater dependent ecosystems, the Schedule will be amended to include further GDEs.

Schedule 7 River reaches in the Bega and Brogo Rivers Regulated Water Source

River reaches in the Bega and Brogo Rivers Regulated Water Source for the purposes on management of extractions during uncontrolled flow events are:

River reach	River reach definition	
1A	Brogo River from the upper reaches of Brogo Dam to the North Brogo gauge (219025).	
1B	Brogo River from the North Brogo gauge to the Angledale gauge (219025).	
1C	Brogo River from the Angledale gauge to the Bega River junction.	
2	Bega River from the Brogo River junction to the end of the regulated river.	

Appendix 1 Overview of the Registered Map





Appendix 2 Inspection of Registered Map

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

NSW Office of Water Department of Environment, Climate Change and Water 10 Valentine Ave PARRAMATTA NSW 2150

NSW Office of Water Department of Environment, Climate Change and Water Level 3, 84 Crown St WOLLONGONG NSW 2520

NSW Office of Water Department of Environment, Climate Change and Water Suite 2 Bega Centre 106 Auckland St BEGA NSW 2550

Appendix 3 Access licences with cease to pump thresholds that are higher than the upper limit of the relevant Very Low Flow Class

It is expected that those access licences which replace a *Water Act 1912* entitlement listed in Column 1 of the table below, which have a share component that specifies the water source listed in Column 2 of the table below, will have the access rule specified in Column 3 imposed as a mandatory condition to give effect to clause 65 (4) of this Plan.

Column 1	Column 2	Column 3
Water Act 1912 entitlements that will be replaced by access licences on commencement of this Plan	Water Source	Access rules
10SL055731	Mid Bega River Tributaries	Water must not be taken when the flow in Bega River at the Kanoona gauge (219032) is less than 50 ML/day.
10SL056464	Wolumla Creek Water Source	Water must not be taken when the flow in Candelo Creek at Greenmount Road (Yurammie no. 4) gauge (219034) is less than 14 ML/day.