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NEW SOUTH WALES

Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008 Order

under the

Water Management Act 2000

Pursuant to section 50 of the Water Management Act 2000, I, the Minister for Water, make the following Minister's plan.

NATHAN REES, MP
Minister for Water

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Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008

Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008

Part 1 Introduction

1 Name of this plan

This Plan is the “Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008” (“*this Plan*”).

2 Nature and Status of this Plan

- (1) This Plan is made under section 50 of the Act.
- (2) This Plan is a plan for water sharing, and generally deals with the matters set out in sections 20 (1), 20 (2) (a) to 20 (2) (e), 20 (3), 20 (4), 21 (a) to 21 (c) and 21 (f) of the Act.

3 Date of commencement

This Plan takes effect on the 1 July 2008.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Western, Border Rivers, Gwydir, Namoi and Central West Water Management Areas known as the NSW Great Artesian Basin Groundwater Sources (“*groundwater sources*”) as shown in Schedule 2.
- (2) These groundwater sources exclude the area of land within the Lower Macquarie Groundwater Source as defined in the Water Sharing Plan for the Lower Macquarie Groundwater Source 2003.

5 Waters to which this Plan applies

- (1) The waters of these groundwater sources include all groundwater contained in the sandstone aquifers of Cretaceous and Jurassic Age and the intake beds of the NSW Great Artesian Basin.
- (2) The groundwater sources in respect of which this Plan is made are:
 - (a) the Eastern Recharge Groundwater Source;
 - (b) the Southern Recharge Groundwater Source;
 - (c) the Surat Groundwater Source;
 - (d) the Warrego Groundwater Source; and
 - (e) the Central Groundwater Source.

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These groundwater sources are shown on the plan called “The NSW Great Artesian Basin Groundwater Sources”, which together with any other map referred to in this plan may be inspected at the Department offices listed in Appendix 1.

6 Interpretation

- (1) Words and expressions that are defined in the Act have the same meaning in this Plan.
- (2) Words and expressions that are defined in Schedule 1 of the Plan have the meanings set out in that Schedule.
- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Appendices to this Plan do not form part of this Plan.

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Part 2 Vision, objectives, strategies and performance indicators

7 Vision, objectives, strategies and performance indicators

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

8 Vision

The vision for this Plan is to achieve the equitable, viable and sustainable management of the groundwater sources for the benefit of the community and the biodiversity of the region.

9 Objectives

The objectives of this Plan are to:

- (a) improve pressures and flows in the artesian portion of the groundwater sources through efficient water use and achieve sustainable extraction in their recharge areas;
- (b) protect, maintain and where possible restore priority environmental assets;
- (c) maintain and enhance cultural and heritage values affected by the use of water from the groundwater sources;
- (d) enhance groundwater use for community benefit;
- (e) adaptively manage these groundwater sources; and
- (f) protect groundwater quality.

10 Strategies

The strategies to achieve the above objectives are to:

- (a) phase out the use of bore drains;
- (b) establish environmental water rules;
- (c) identify water requirements for basic landholder rights;
- (d) identify water requirements for access licences;
- (e) establish rules for the granting of access licences and approvals;
- (f) establish rules that place limits on the availability of water;
- (g) establish rules for the making available water determinations;
- (h) establish rules for the operation of water accounts;
- (i) establish rules which specify the circumstances under which water may be extracted; and
- (j) establish access licence dealing rules.

11 Performance Indicators

- (1) The following indicators are to be used to determine the performance of this Plan against its objectives:
 - (a) change in groundwater extraction volume relative to the long-term average annual extraction limit;
 - (b) change in groundwater levels and pressures;

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- (c) change in groundwater levels and pressures adjacent to identified groundwater dependent ecosystems;
 - (d) change in groundwater quality;
 - (e) extent to which domestic and stock rights requirements have been met;
 - (f) extent to which native title rights requirements have been met;
 - (g) extent of recognition of spiritual, social and customary values of groundwater to Aboriginal people;
 - (h) extent to which local water utility requirements have been met;
 - (i) change in the economic benefits derived from groundwater extraction and use; and
 - (j) the total length of bore drains replaced by efficient water distribution methods.
- (2) The Minister is to undertake an assessment of the performance of the Plan against these performance indicators after each five year period in which the Plan has been in operation.

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Part 3 Basis for water sharing

12 Basis for water sharing

- (1) This Part is made in accordance with sections 20 (2) (a) and 20 (2) (c) of the Act.
- (2) The overall basis for water sharing in the Eastern Recharge and Southern Recharge Groundwater Sources is the long-term average annual net recharge to the respective groundwater source which are estimated to be as follows:
 - (a) 19,000 megalitres per year (*ML/year*) for the Eastern Recharge Groundwater Source; and
 - (b) 42,400 ML/year for the Southern Recharge Groundwater Source.
- (3) The overall basis for water sharing in Surat, Warrego and Central Groundwater Sources is the the volume of water required to maintain pressure levels experienced under the level of water extraction associated with the water entitlements, infrastructure and management rules in place at 1990 (*sustainable pressure estimate equivalent*) within these Groundwater sources, which is estimated to total 105,300 ML/year and to be:
 - (a) 75,000 ML/year for the Surat Groundwater Source;
 - (b) 22,400 ML/year for the Warrego Groundwater Source; and
 - (c) 7,900 ML/year for the Central Groundwater Source.
- (4) The estimated volumes for water sharing in Surat, Warrego and Central Groundwater Sources in subclause 12(3)(a), (b) and (c) may be varied through the granting of aquifer access licences and dealings so that they are equal to or greater than:
 - (a) 67,500 ML/year for the Surat Groundwater Source;
 - (b) 21,600 ML/year for the Warrego Groundwater Source; or
 - (c) 7,110 ML/year for the Central Groundwater Source;provided that the combined totals of the volumes for these groundwater sources is 105,300 ML/year.
- (5) The Minister may vary the long-term average annual net recharge estimate for each groundwater source established in subclause (2) after year 5 of this Plan, following further recharge studies that are acceptable to the Minister.
- (6) The Minister may vary the sustainable pressure estimate equivalent for each groundwater source established in subclause (3) after year 5 of this Plan, following further pressure studies that are acceptable to the Minister.

13 Climatic variability

- (1) This Plan recognises the effect of climatic variability on recharge in the groundwater sources by having provisions that manage:

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- (a) the sharing of water in these groundwater sources within the limits of water availability on a long-term basis; and
- (b) water extraction to a volume that ensures both the protection of groundwater dependent ecosystems and water quality of these groundwater sources.

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Part 4 Environmental water provisions

14 Environmental water provisions

This Part is made in accordance with section 20 (1) (a) of the Act.

15 Planned environmental water

- (1) Planned environmental water in the Eastern Recharge and the Southern Recharge Groundwater Sources is as follows:
 - (a) the long-term average storage component of the respective groundwater source;
 - (b) plus 30% of the long-term average annual net recharge to the respective groundwater source.
- (2) Planned environmental water in the Surat, Warrego and Central Groundwater Sources is:
 - (a) sustainable pressure estimate equivalent;
 - (b) minus the increased extraction from 1990 until the commencement of this Plan;
 - (c) plus the water savings made through the capping and piping of any water bores from 1990 to 30 June 1999;
 - (d) plus 70% of the water savings made through the capping and piping of any water bores from 1 July 1999.
- (3) The Minister may vary the proportion of long-term average annual net recharge and/or the percentage of water savings made available through the capping and piping of any water bores that is reserved as planned environmental water in subclause (1) and (2) after year 5 of this Plan, based on further studies of groundwater ecosystem dependency, acceptable to the Minister. The extent of any variation will be determined by the Minister after considering the needs of the environment and socio-economic impacts of the proposed variation.

16 Adaptive environmental water

- (1) The holder of an access licence may request that the Minister impose an adaptive environmental water condition in respect of the access licence

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Part 5 Basic landholder rights

17 Basic landholder rights

This Part is made in accordance with section 20 (1) (b) of the Act.

18 Domestic and stock rights

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights within these groundwater sources are estimated to total 52,300 ML/year, and are distributed as follows:
 - (a) 2,000 ML/year in the Eastern Recharge Groundwater Source;
 - (b) 3,000 ML/year in the Southern Recharge Groundwater Source;
 - (c) 28,100 ML/year in the Surat Groundwater Source;
 - (d) 14,300 ML/year in the Warrego Groundwater Source; and
 - (e) 4,900 ML/year in the Central Groundwater Source.
- (2) This Plan recognises that the exercise of domestic and stock rights may change during the term of this Plan.

Note. Basic landholder rights exercised under section 52 of the Act must be exercised in accordance with any guidelines established by the Minister with respect to the reasonable use of water for domestic consumption and stock watering.

Inherent water quality and land use activities may make the groundwater in some areas unsuitable for human consumption. Water from these groundwater sources should not be consumed without it first being tested and appropriately treated.

19 Native title rights

- (1) At the commencement of this Plan there are no native title rights in these groundwater sources and therefore the water requirements for native title rights total 0 ML/year.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note. Native Title claims have been lodged which may cover parts of the area to which this Plan applies.

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Part 6 Bulk access regime

20 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in these groundwater sources having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climate variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are to be granted as provided for in Part 8 of this Plan,
 - (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,
 - (d) establishes rules according to which available water determinations are to be made as provided for in Part 9, Division 1 of this Plan,
 - (e) establishes rules according to which access licences are to be managed as provided for in Part 9 and Part 10 of this Plan, and
 - (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Part 9 of this Plan.

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Part 7 Requirements for water under access licences

21 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

22 Share component of domestic and stock (conveyance) access licences

It is estimated that at the time of commencement of this Plan, the total share components of domestic and stock (conveyance) access licences authorised to extract water from these groundwater sources will total 0 ML/year.

Note. On 1 July 2013 regulations will be introduced to require for the creation of Domestic and Stock (Conveyance) access licences for all those taking water for domestic consumption and stock watering under section 52 who are not taking the water through an efficient water distribution system. Charges may be imposed for these licences consistent with any determination by the Independent Pricing and Regulatory Tribunal.

23 Share component of local water utility access licences

It is estimated that at the time of commencement of this Plan, the share components of local water utility access licences authorised to extract water from these groundwater sources will total 5,893 ML/year, which is distributed in the groundwater sources as follows:

- (a) 500 ML/year in the Eastern Recharge Groundwater Source;
- (b) 1,650 ML/year in the Southern Recharge Groundwater Source;
- (c) 3,415 ML/ year in the Surat Groundwater Source;
- (d) 167 ML/year in the Warrego Groundwater Source; and
- (e) 161 ML/year in the Central Groundwater Source.

24 Share component of aquifer (interference) access licences

It is estimated that at the time of commencement of this Plan, the share components of aquifer (interference) access licences authorised to extract water from these groundwater sources will total 0 ML/year.

25 Share component of aquifer access licences

- (1) It is estimated that at the time of commencement of this Plan, the share components of aquifer access licences authorised to extract water from these groundwater sources will total 74,450 unit shares, which is distributed in the groundwater sources as follows:
 - (a) 32,000 unit shares in the Eastern Recharge Groundwater Source;
 - (b) 25,000 unit shares in the Southern Recharge Groundwater Source;
 - (c) 15,100 unit shares in the Surat Groundwater Source;
 - (d) 1,600 unit shares in the Warrego Groundwater Source; and

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- (e) 750 unit shares in the Central Groundwater Source.

26 Share component of supplementary water access licences

At the commencement this Plan, the share components of supplementary water access licences authorised to extract water from these groundwater sources will total 0 unit shares.

27 Changes to total share components

- (1) After the first year of this Plan the share component of each aquifer access licence in the Eastern Recharge and Southern Recharge Groundwater Sources may be reduced in accordance with a process to be determined by the Minister and specified in the Implementation Program for the Plan, to ensure that the total share component of all access licences excluding supplementary water access licences in those groundwater source is equal to:
 - (a) the net recharge specified in clause 12 (2) for each groundwater source,
 - (b) minus the amount of net recharge reserved for the environment specified in clause 15 (1) for each groundwater source,
 - (c) minus basic landholder rights requirements for each groundwater source.
- (2) Those aquifer access licence holders who have their share component reduced under subclause (1) will be granted a supplementary water access licence with a share component equal to the difference between their aquifer access licence share component and their history of extraction that existed prior to the commencement of this Plan as determined by the Minister.
- (3) The share component of each supplementary water access licence in the Eastern and Southern Recharge Groundwater Sources will be reduced to 0ML/yr after year 9 of this Plan and no .
- (4) The share component of each domestic and stock (conveyance) access licence in the Surat, Warrego and Central Groundwater Sources will be reduced to 0 ML/yr after completion of the capping and piping of the approved work, which is nominated on the licence.
- (5) If reductions are required to share components of aquifer access licences under subclause (2) the Minister should establish a committee, which will include:
 - (a) representatives from the Great Artesian Basin Advisory Group and water utilities, and
 - (b) representatives of the irrigation and other industry and domestic and stock rights groundwater users in each water source in which share component reductions are required,

to advise on the process for share component reduction having regard to the requirements of subclause (8).
- (6) In determining the process for entitlement reduction under subclause (1) the Minister should consider the advice of the committee established under subclause (6).
- (7) The share component reduction process established under subclause (1) should recognise:
 - (a) water dependent investment made by licence holders prior to 1 July 2007, and
 - (b) that all groundwater entitlements, whether or not they have been used to extract water, have a value.

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Note. When domestic and stock (conveyance) access licences have their share component reduced to 0 ML/yr they may be cancelled under the Act on the basis that the purpose for which the licence no longer exists. All supplementary licences will be cancelled after year 9 of this Plan as the Plan will at that point cease to make provision for the extraction of water under these access licences.

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Part 8 Rules for granting access licences and approvals

28 Rules for granting access licences

- (1) This clause is made in accordance with sections 20 (2) (b) of the Act, having regard to the limits to water availability in these groundwater sources and the need to protect groundwater dependent ecosystems and groundwater quality.
- (2) Applications for access licences may be made in these groundwater sources, if the application is for:
 - (a) an aquifer access licence of the subcategory Aboriginal community development;
 - (c) an access licence that may be granted in accordance with a dealing,;
 - (d) an aquifer (interference) access licence in the Surat, Warrego or Central Groundwater Sources,
 - (e) a supplementary water access licence in accordance with clause 29 (3) of this Plan; and
- (3) An application for an access licence under subclause (2) in the Surat, Warrego or Central Groundwater Sources can only be granted if the share component of the proposed access licence plus the total share component of all access licences in the respective Groundwater Source does not exceed the estimated volume for water sharing specified in clause 12 (4) minus the planned environmental water specified in clause 15 (2), as amended by clause 15(3).
- (4) An access licence of the subcategories Aboriginal cultural or Aboriginal community can only be granted if the application does not exceed:
 - (a) 10ML/year for an aquifer (Aboriginal cultural) access licence; and
 - (b) 50ML/year for an aquifer (Aboriginal community) access licence.
- (5) An application for a specific purpose access licence application will only be granted if the share or extraction component of the access licence is the minimum required to meet the circumstances in which the access licence is proposed to be used.

Note. The issue of aquifer access licences in the Surat, Warrego or Central Groundwater Sources will be undertaken through a controlled allocation order.

The Act at the commencement of this Plan defined an “aquifer” to mean a geological structure or formation, or an artificial landfill, that is permeated with water or is capable of being permeated with water and an “aquifer interference activity” to mean an activity involving any of the following:

- (a) the penetration of an aquifer,
- (b) the interference with water in an aquifer,
- (c) the obstruction of the flow of water in an aquifer,
- (d) the taking of water from an aquifer in the course of carrying out mining, or any other activity prescribed by the regulations,
- (e) the disposal of water taken from an aquifer as referred to in paragraph (d).

The Act should be checked to confirm the currency of this definitions.

29 Rules for granting or amending water supply works approvals

- (1) This clause is made in accordance with sections 21(b) and (d).
- (2) The Minister shall not grant an approval or amend an approval, which is to be used to take water under a local water utility or town water supply access licence, where the proposed water supply work for a water bore is proposed to be located within:
 - (b) 5 km of high priority groundwater dependent ecosystems listed in Schedule 4 in the Eastern Recharge and Southern Recharge Groundwater Sources, and
 - (c) 50 km of high priority groundwater dependent ecosystems listed in Schedule 4 in the Surat, the Warrego and the Central Groundwater Sources.
- (3) The Minister shall not grant an approval or amend an approval for a water supply work for a water bore, which is to be used to take water under basic landholder rights, or grant an approval or amend an approval for a water supply work for a water bore, which is to be used to take water under an access licence(s), other than a water supply work for a water bore, which is to be used to take water for a local water utility or town water supply access licence, where the bore is proposed to be located within:
 - (a) 50 kilometres of any high priority groundwater dependent ecosystem listed in Schedule 4 in the Surat, Warrego or Central Groundwater Sources; or
 - (b) 5 kilometres of any high priority groundwater dependent ecosystem listed in Schedule 4 in the Eastern or Southern Recharge Groundwater Sources for a water bore which may extract more than 20 ML/year under basic landholder rights, a supplementary water access licence or an access licence in total; or
 - (c) 1 kilometres of any high priority groundwater dependent ecosystem listed in Schedule 4 in the Eastern or Southern Recharge Groundwater Sources for a water bore which may not extract more than 20 ML/year under basic landholder rights, a supplementary water access licence or an access licence in total; or
 - (d) 200 meters from a 3rd order or higher watercourse in the Eastern or Southern Recharge Groundwater Sources; or
 - (e) 500 meters of an approved water supply work for a water bore which may extract more than 20 ML/year under basic landholder rights, a supplementary water access licence or an access licence in total; or
 - (f) 100 meters of an approved water supply work for a water bore which may not extract more than 20 ML/year under basic landholder rights or access licence or an access licence in total; or
 - (g) 200 meters of the applicant's landholding boundary.
- (4) Where the distance conditions specified in subclauses (2) or (3) cannot be met, the Minister may grant a works approval provided:
 - (a) a hydrogeological study undertaken by the applicant, that the Minister determines is adequate, demonstrates that there is minimal potential for unacceptable adverse impacts on:

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- (i) any high priority groundwater dependent ecosystem listed in Schedule 4 in the Surat, Warrego or Central water source; or
 - (ii) any 3rd order or higher watercourse in the Eastern or Southern Recharge Groundwater Sources; or
 - (iii) the aquifer; or
 - (iv) extraction from other approved water supply works for water bores in the area.
 - (b) all potentially impacted holders of water supply works approved for water bores have been notified by the proponent; and
 - (c) a condition is imposed on the approval to provide for a process of remediation in the event that unacceptable adverse impact occur in the future.
- (5) The Minister may vary this Plan to amend the distance restrictions in subclauses (2) and or (3) or add additional restrictions to minimise potential impacts on groundwater dependant ecosystems, the aquifer or neighbouring water bores after year 5 of this Plan.
- (6) The Minister may vary Schedule 4 of this Plan after year 5 of this Plan based on further studies of groundwater ecosystem dependency acceptable to the Minister.
- (7) The Minister must not grant an approval, amend an approval, or consent to the nomination of a water supply work for a water bore on an access licence, where a proposed water supply work for a water bore is proposed to be located within 500 meters of a contamination source as listed in Schedule 4 or other contamination source identified by a site inspection through other relevant information provided to the Minister unless the proponent demonstrates to the Minister's satisfaction that construction of and extraction from water supply work for a water bore will not:
- (i) result in harm to the groundwater source; or
 - (ii) impact on the environment; or
 - (iii) cause a threat to public health as determined by the Minister for Health.
- (8) Subclause (7) does not apply to a water supply works that is a bore used for monitoring, environmental management purposes or remedial works.
- (9) The Minister may vary Schedule 3 of this Plan to add or remove contaminated sites at any time.
- (10) The Minister shall not grant an approval for a water supply work that is a water bore, amend an approval, or consent to a nomination of a work for a water bore on an access licence in the Eastern Recharge Zone until entitlements have been reduced under clause 27(1) or year 6 of the plan, whichever is the sooner.
- (11) The Minister shall not grant an approval for a water supply work that is a water bore, amend an approval, or consent to a nomination of a work for a water bore on an access licence where the taking of water would result in a predicted cumulative drawdown by all approved water supply works for water bores in the area in excess of 10% of the potentiometric surface at the commencement of this Plan at the state border with Queensland or South Australia, without consulting the respective state government minister.

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- (12) Clauses (2)-(6), 10 and 11 do not apply if the application is to amend a water supply work approval to construct a water bore to replace the water bore originally constructed in accordance with the approval where that replacement water bore is to be constructed within 20 meters of the existing water bore and it has an internal diameter no greater than 110 percent of the internal diameter of the bore it replaces.

Note. While an access licence is not needed to take water under a basic landholder rights, the works used to take the water must be the subject of a water management works approval

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Part 9 Limits to the availability of water

Division 1 Long-term average annual extraction limit

30 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

31 Annual extraction limits

- (1) The annual extraction limits for the Eastern Recharge and the Southern Recharge Groundwater Sources are the long-term average annual net recharge to the respective groundwater source as specified in clause 12 (2) minus the amount of planned environmental water specified in clause 15 (1) (b) plus available water determinations made to supplementary water access licences in the respective groundwater source.
- (2) The annual extraction limits for the Surat, Warrego and Central Groundwater Sources are the estimated volumes resulting from the sustainable pressure estimate equivalent for the respective groundwater source as specified in clause 12 (3) as varied by clause 12(4) minus the planned environmental water for the respective groundwater source specified in clause 15(2) as varied by clause 15(3).

32 Variation of annual extraction limits

If there is any change to the annual extraction limits arising from clauses 12 and 15 then:

- (a) the extraction limit in any of these groundwater sources will not increase by more than 20% during the term of this Plan; and
- (b) the extraction limit in any of these groundwater sources will not decrease by more than 20%, during the term of this Plan.

33 Compliance with the long-term average annual extraction limits

- (1) Water extraction in these groundwater sources will be monitored each water year to determine if there has been any growth in the volume extracted above the long-term average extraction limit specified in clause 31, based on a comparison of the long-term average extraction limit against the average extraction within the respective groundwater source over that year and the preceding 2 years. For the purposes of this monitoring the two years prior to this Plan commencing will be included for making the required comparison.
- (2) For the purposes of auditing compliance with the long-term average extraction limit, if water that:
 - (a) pursuant to an access licence is committed as adaptive environmental water is to be left in the aquifer for environmental purposes, then extraction will be treated as being equal to 100% of the available water determination made under clause 34,
 - (b) pursuant to an access licence is committed as adaptive environmental water to be extracted for environmental purposes, then extraction will be that measured through the approved water supply work.

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- (3) If the 3 year average of extraction in this groundwater source exceeds the long-term average extraction limit established in clause 31 by 5% or greater, then the available water determination made for aquifer access licences under clause 34 for the following water year, should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit.

Division 2 Available water determinations

34 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) All available water determinations in these groundwater sources shall be expressed as either:
- (a) a percentage of the share component for all access licences where share components are specified as ML/year; or
 - (b) megalitres per unit of share component for all access licences where share components are specified as a number of unit shares.
- (3) An available water determination for each category of access licence in these groundwater sources should be made at the commencement of each water year.
- (4) The available water determinations made at the commencement of the water year for local water utility access licences, domestic and stock (conveyance) access licences and aquifer (interference) access licences in these groundwater sources should be 100% of those licences share components.
- (5) The available water determination made at the commencement of this Plan for aquifer access licences in the Southern Recharge, Surat, Warrego and Central Groundwater Sources should be 1 ML per unit of share component, and for aquifer access licences in the Eastern Recharge Groundwater Source should be 0.8 ML per unit of share component.
- (6) From year 2 of this Plan the available water determination made at the commencement of the water year for aquifer access licences in all groundwater sources should be an amount that would not cause total extractions to exceed the respective annual extraction limit specified in clause 31 or such lower amount as results from the operation of clause 33 (3).
- (7) If supplementary water access licences are established in the Eastern Recharge or the Southern Recharge Groundwater Sources in accordance with clause 25 (1) then the available water determination made at the commencement of the water year for those licences shall be:
- (a) 1 ML per unit of share component in years 2-5;
 - (b) 0.8 ML per unit of share component in year 6;
 - (c) 0.6 ML per unit of share component in year 7;
 - (d) 0.4 ML per unit of share component in year 8;
 - (e) 0.2 ML per unit of share component in year 9; and
 - (f) 0 ML per unit of share component in year 10.

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- (9) This Plan amends the relative priorities of the categories of aquifer access licence and supplementary water access licence to the extent necessary to make the available water determinations as set out in this clause.

Part 10 Rules for managing access licences

Division 1 General

35 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 21 (a) and 21 (c) of the Act, having regard to this Plan's:

- (a) environmental water rules;
- (b) requirements for water to satisfy basic landholder rights; and
- (c) requirements for water for extraction under access licences.

Division 2 Water allocation account management

36 Annual accounting for water extraction

- (1) Water taken by an approved water supply work nominated by an access licence will be periodically debited against the access licence water allocation account.
- (2) Where an approved water supply work is being used both to take water for basic landholder rights and an access licence(s), the water is to be accounted on the basis that an annual volume equal to the basic landholder right for the water year will be the first volume regarded as being taken and all other water taken in that year will be accounted as extraction pursuant to the access licence(s).
- (3) Where both an aquifer access licence and a supplementary water access licence nominate the same water supply works and use approval, water allocations will be debited from a supplementary water access licence water allocation account before water is debited from an aquifer access licence water allocation account.
- (4) The water in a water allocation account of a domestic and stock (conveyance) access licence and an aquifer (interference) access licence at any time may not exceed a volume equal to 100% of the share component of the access licence.
- (5) The water in a water allocation account of a local water utility access licence at any time may not exceed a volume equal to:
 - (a) 100% of the share component of the access licence;
 - (b) plus any water allocations assigned from another access licence in that water year;
 - (c) plus any water allocations re-credited in that year; and
 - (d) minus any water allocations assigned to another licence in that water year.
- (6) Water allocations in the water allocation accounts of local water utility access licences, domestic and stock (conveyance) access licences and aquifer (interference) access licences at the end of a water year cannot be carried over to the next water year.

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- (7) The water in a water allocation account of an aquifer access licence account at any time in a water year may not exceed a volume equal to:
- (a) 1.6 ML per unit of share component;
 - (b) plus any water allocations assigned from another licence in that water year, and
 - (c) minus any water allocations assigned to another licence in that water year.
- (8) Subject to any local impact rules that are in force under this Plan water taken from the water allocation account of an aquifer access licence in a water year may not exceed a volume equal to:
- (a) 1.3 ML per unit of share component;
 - (b) plus any water allocations assigned from another licence in that water year; and
 - (c) minus any water allocations assigned to another licence in that water year.
- (9) Water allocations in a water allocation account of an aquifer access licence at the end of a water year may be carried over to the next water year subject to the account limit specified in clause (7).

Note. In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in these groundwater sources. Water allocations will be accrued into each water allocation account each year in accordance with the available water determinations made for that category of access licence. Water allocations may be assigned to, or from, these accounts by a water allocation assignment made under section 71T of the Act, where these are allowed under rules specified in Part 11 of this Plan.

Division 3 Management of local impacts

37 Management of local impacts

- (1) This Division is made in accordance with section 21 (a) of the Act.
- (2) The Minister may declare a defined area to be known as a local impact area in order to:
- (a) protect pressures in the Surat, Warrego and Central groundwater sources;
 - (b) protect water levels in the Eastern and Southern Recharge groundwater sources;
 - (c) protect water quality within a groundwater source; or
 - (d) protect groundwater-dependent ecosystems through the protection of water quality and/or water levels.
- (3) A declaration under subclause (2) is to set out the local impact rules, which are to apply in a local impact area.
- (4) The Minister is to advise in writing each licence or approval holder who is in a local impact area of the local impact rules that their licence or water supply works approval is now subject to.

38 Water pressure and level management

- (1) Where the Minister declares a local impact area under this Plan, extraction will be restricted to such an extent and for such time as is required to restore groundwater pressure or groundwater levels to a sustainable level and/or to protect or restore groundwater-dependent ecosystems.
- (2) The Minister may nominate specific water levels or pressures to ensure extraction does not cause an ongoing decline in groundwater pressure or groundwater levels.
- (3) The Minister may vary the local impact rules to such an extent as to allow recovered groundwater pressure or groundwater levels to operate within the normal bounds of climate variability.

Note. This clause recognises that in some locations, at certain periods of high groundwater demand, critical water level declines may occur, and that additional extraction limitations may be required. The Department of Water and Energy will identify monitoring bores, specify the target level, and determine the method for specifying an affected area.

39 Water quality management

- (1) The beneficial use of these groundwater sources is as follows:
 - (a) for ecosystem protection;
 - (b) for recreation and aesthetics;
 - (c) for raw drinking water supply;
 - (d) for agricultural water; and
 - (e) for industrial water.
- (2) Water quality decline will be deemed unacceptable if extraction causes, or is likely to cause, water quality to decline to a lower beneficial use class, as prescribed within the framework described in the NH&MRC/ARMCANZ *Australian Drinking Water Guidelines* (1996), and the ANZECC/ARMCANZ *Guidelines for Fresh and Marine Water Quality* (2000).
- (3) There are localised areas within these groundwater sources where the beneficial use is of a lower class.
- (4) Before declaring a local impact area the Minister should consider water analysis from water bores within the proposed local impact area.
- (5) If water quality decline is resulting from extraction, extraction from all water supply works for water bores nominated by an access licence within a local impact area will be restricted to such an extent and for such time as required to halt that decline, or restore the beneficial use of the groundwater source.
- (6) In the case of subclause (5) the local impact rules may be expressed:
 - (a) as restrictions on yearly, quarterly, or weekly extraction in the affected areas; and
 - (b) they will subject to review and amendment as a result of the assessment of data from monitoring bores within the local impact area.

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40 Group registration of access licences

Where a local impact area has been declared licence holders within the area can apply to the Minister to form a group of access licences for the purpose of extracting water in accordance with the local impact rules. Such groups are subject to the following rules:

- (a) the Minister is to maintain a register of each group of access licences;
- (b) total extraction by all access licences within a group must not exceed their combined restrictions on extractions specified in the local impact rules;
- (c) no access licence holder within the group may extract more than the volume of water in their water allocation account or the volume of water that is permitted by the Plan's water accounting rules in any water year;
- (d) an access licence holder may apply to the Minister to be removed from the group. The combined restriction on extraction by the remaining members of the group will be reduced by the restriction on extraction of the licence removed from the group;
- (e) an access licence holder may apply to the Minister to be added to the group. The combined restriction on extraction by the expanded members of the group will be increased to the combined restriction on extraction of the enlarged group; and
- (f) the Minister has the the right to remove a licence holder from a group where that individual causes the total group extraction restriction to be exceeded, or to dissolve a group where its members exceed their combined extraction restriction.

41 Infrastructure failure in these water sources

- (1) The operational rules relating to a local impact area may rely on water levels, pressure or quality at specified monitoring water bores.
- (2) In the event of a monitoring water bore failing the Minister may:
 - (a) continue with the current access rules until the monitoring water bore is reinstated;
 - (b) adjust the current access rules based on climatic conditions and data from another monitoring water bore(s), until that monitoring water bore is reinstated; and
 - (c) rely on another monitoring water bore in the area to provide information.

Part 11 Access licence dealing rules

42 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act.
- (2) An application for a dealings can only be made in accordance with the access licence dealing rules established by this plan and any access licence dealing principles order which is in force.

43 Rules relating to constraints within a groundwater source

- (1) This clause applies to any relevant dealings under sections 71Q, 71S, 71T and 71W of the Act.
- (2) Applications for the dealings specified in subclause (1) are prohibited if:
 - (a) the access licences or water allocations involved are not within the same groundwater source;
 - (b) the dealing would result in the total extraction under access licences through nominated water supply works that are water bores in the area, plus basic landholder rights extraction, causing any adverse local impacts; and
 - (c) the dealing involves a domestic and stock (conveyance) access licence or supplementary water access licence, or any water allocation credited to a domestic and stock (conveyance) access licence or supplementary water access licence water allocation account.
- (3) Applications for the dealings specified in subclause (1) in the Eastern Groundwater Source are prohibited until either the share components of aquifer access licences in these groundwater sources are reduced under clause 25(1) or the commencement of year six of this Plan, whichever is the sooner.

44 Rules for change of water source

- (1) This clause relates to dealings under section 71R of the Act.
- (2) Applications for the dealings specified in subclause (1) are prohibited if:
 - (a) the dealing is to or from Eastern Recharge Groundwater Source or to or from Southern Recharge Groundwater Source; or
 - (b) the dealing is to or from any other water source not covered by this plan; or
 - (c) the dealing will result in the share component of the proposed access licence plus the total share component of all access licences in the Groundwater Source exceeding the estimated volume for water sharing specified in clause 12(4) minus the planned environmental water specified in clause 15(2), as amended by clause 15(3).

45 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71O of the Act.
- (2) Dealings to convert an access licence to another category or subcategory are prohibited.

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46 Rules for interstate access licence transfer and assignment of water allocations

- (1) This clause relates to dealings under section 71U and 71V of the Act.
- (2) Dealings that result in the interstate transfer of an access licence or the interstate assignment of water allocations to or from these groundwater sources are prohibited until such time as an interstate agreement has been reached between the relevant State governments regarding the management of such dealings.

47 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71T of the Act.
- (2) Water allocation assignments between access licences in these groundwater sources are prohibited if:
 - (a) the dealing is from the Surat, the Warrego or the Central Groundwater Source to the Eastern Recharge Groundwater Source or the Southern Recharge Groundwater Source;
 - (b) the dealing is from the Eastern Recharge Groundwater Source to the Southern Recharge Groundwater Source;
 - (c) the dealing is from the Southern Recharge Groundwater Source to the Eastern Recharge Groundwater Source;
 - (d) the dealing is from the Eastern Recharge or Southern Recharge Groundwater Source to the Surat, Warrego, or the Central Groundwater Sources; and
 - (e) the dealing is from or to any other water source not covered by this plan.

Part 12 Mandatory conditions

48 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
- (2) All access licences in these groundwater sources shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) water cannot be taken in excess of the volume of water allocated to, or assigned to, the account;
 - (b) the requirement that all extraction under access licences will be subject to any local impact rules established under this Plan;
 - (c) the requirement that all extraction under access licences will be subject to the account management rules established in this Plan;
 - (d) the requirement that water may only be taken under the licence by a water supply work listed on the approval nominated on the access licence, and
 - (e) any other conditions required to implement the provisions of this Plan.
- (3) All local water utility access licences shall have mandatory conditions that only allow the taking of water for the exercise of a water supply function of the local water utility, as a result of a dealing permitted under section 71T or the access licence dealing principles or for other such purpose provided for under the Act..
- (4) All (Aboriginal cultural) access licences shall have mandatory conditions that only allow the taking of water by Aboriginal persons or communities for personal, domestic and communal purposes, including for the purpose of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, and gathering, and for recreational, cultural and ceremonial purposes.
- (5) The Minister may vary the Plan to amend the mandatory conditions that must be imposed on access licences or to require that additional mandatory conditions be imposed.

49 Mandatory conditions on water supply works approvals for a water bore

- (1) All approvals for water supply works (bores) in these groundwater sources shall have mandatory conditions to give effect to the following:
 - (a) the water supply work is only to be constructed by a driller licensed under the Water Act 1912 or the Water Management Act 2000,;
 - (b) the water supply work must comply with drilling standards as specified by the Minister;
 - (c) if during the construction of a water supply work (bore), saline or contaminated water is encountered above the production aquifer, such water is to be sealed off by:
 - (i) inserting the appropriate length(s) of casing to a depth sufficient to exclude the saline or contaminated water from the work; and

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- (ii) placing an impermeable seal between the casing(s) and the wall of the bore hole from ground level to the top of any screens or in the absence of any screen to the bottom of the casing, as specified by the Minister.
- (d) an extraction measurement devices shall be installed and maintained on each water supply work used for extraction of water under access licence, and shall be of a type and shall be maintained in a manner which is acceptable to the Minister. For water supply works other than those under an access licence used for the extraction of water, an extraction measurement device, shall be installed and maintained on such works, if and when directed to do so by the Minister and shall be of a type and maintained in a manner which is acceptable to the Minister,.
- (e) a new or replacement water supply work (bore) to access water for basic rights will be required, as a condition of approval, to be constructed to sufficient depth to ensure that access to the resource will not be unacceptably impacted by other authorised extractions,
- (f) the water supply work approval holder is, within 2 months of completion, or after the issue of the approval if the water supply work (bore) is existing, to provide the Minister with:
 - (i) details of the work on the prescribed form;
 - (ii) details of any water analysis and/or pumping tests required by the Minister,
- (g) if a water supply work (bore) is abandoned, the water supply work (bore) approval holder is to:
 - (i) notify the Minister that the work has been abandoned; and
 - (ii) ensure that any abandoned work is decommissioned and that the decommissioning procedures comply with any standards specified by the Minister for the purpose.
- (h) a water supply work must comply with any relevant local impact rules established by this Plan.
- (i) a water supply work approval holder must supply to the Minister on request, and to the required standards, a report pertaining to the quality of the water obtained from the water supply work.
- (j) all approved water supply works in these groundwater sources shall have a mandatory condition to give effect to an extraction limiting condition arising from this Plan if that is required to restrict the taking of water from these groundwater sources consistent with such condition.
- (k) any other conditions required to implement the provisions of this Plan.
- (l) any application to amend the water supply work approval to allow the construction of a water bore to replace the water bore originally constructed in accordance with the approval can only be constructed if the replacement water bore is to be constructed within 20 meters of the existing water bore and it has an internal diameter no greater than 110 percent of the internal diameter of the bore it replaces.

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- (2) The Minister may under vary this Plan to either amend the mandatory conditions that are to be imposed on water supply works approvals or to require that additional mandatory conditions be imposed

Note. In accordance with the Act, actual extraction of groundwater can only be undertaken through an approved water supply work (bore). Standards and conditions relating to the construction, maintenance, operation and decommissioning of these works are particularly important. If not properly adhered to, the works themselves can be a conduit for contamination of the groundwater source.

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Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

Act is the *Water Management Act 2000*.

artesian refers to groundwater under sufficient pressure to rise above the level at which it is encountered by a bore.

contamination source is where a part of the groundwater sources have a substance present within them at a concentration above that at which the substance is normally present, and at a level that presents a risk of harm to human health, the environment or at a level which reduces the beneficial use of a groundwater source.

drawdown refers to 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.

groundwater is water that occurs beneath the surface of the ground in the saturated zone.

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

high priority groundwater dependent ecosystems are groundwater dependent ecosystems which are considered high priority for management actions.

Minister is the Minister administering the Act.

monitoring bore refers to a bore constructed for the purpose of measuring water levels and/or taking samples for water quality analysis.

net recharge is the difference between recharge and the through flow water component required for the other groundwater sources.

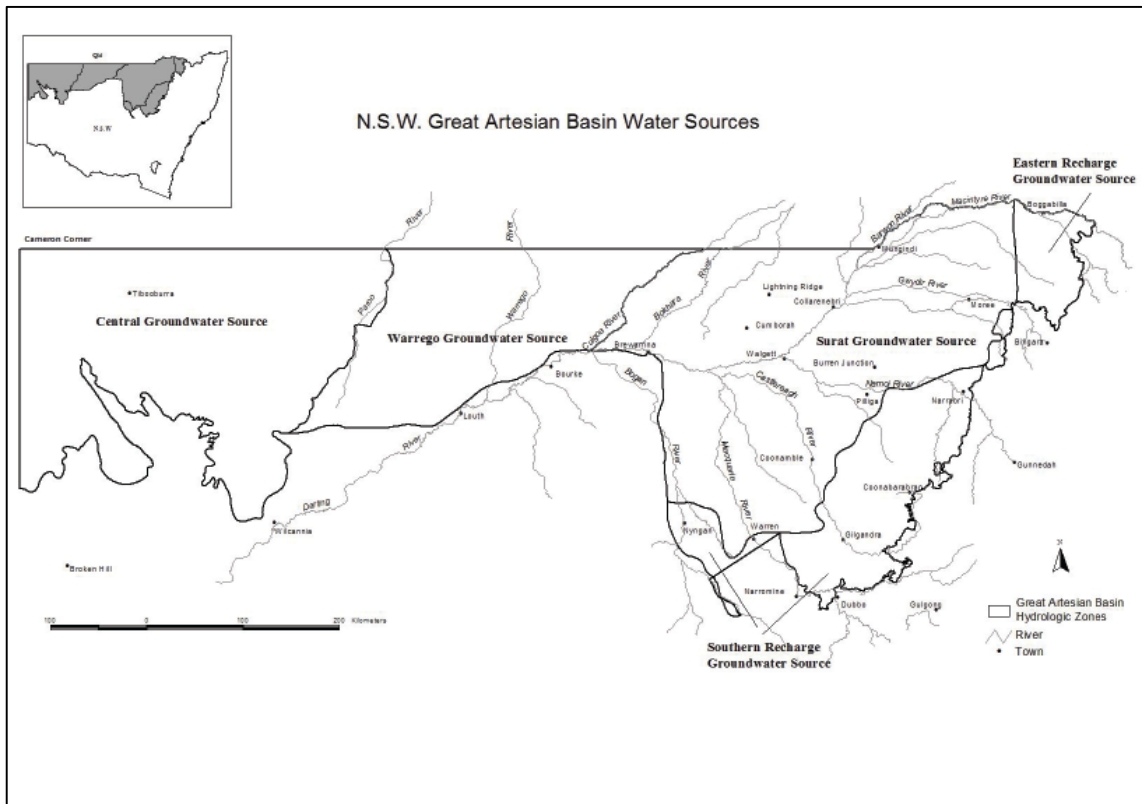
recharge is the long term average annual volume of water that replenishes the aquifer.

sandstone is sedimentary rock formed by the consideration of sand grains, with the sand component often predominantly quartz and cemented by a fine grained matrix.

water year means a year commencing 1 July.

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Schedule 2 Plan area



Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008

Schedule 3 Contamination sources in the NSW Great Artesian Basin Groundwater Sources

At the commencement of this Plan no contamination sources have been identified.

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Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008

Schedule 4 High priority groundwater dependent ecosystems

This plan identifies the following high priority groundwater dependent ecosystems:

Groundwater Dependent Ecosystem Name	Groundwater Dependent Ecosystem Classification	Location			
		Latitude S		Longitude E	
		Degrees	Minutes	Degrees	Minutes
Boongunyah Spring	Geothermal springs	29	27	145	6
Bunnavinyah Spring	Geothermal springs	29	14	146	24
Coolabah Spring	Geothermal springs	30	50	146	57
Coonbilly Springs	Geothermal springs	29	32	145	15
Cuddie Spring	Geothermal springs	30	23	147	20
Cumborah Springs	Geothermal springs	29	44	147	46
Goonery Spring	Geothermal springs	30	2	145	6
Gooroomero Spring	Geothermal springs	29	7	146	38
Jacombe Spring	Geothermal springs	29	13	144	43
Kullyna Spring	Geothermal springs	29	28	145	48
Lake Eliza Spring	Geothermal springs	29	26	145	3
Lila Springs	Geothermal springs	29	33	146	3
Mascot Springs	Geothermal springs	29	33	145	23
Mother Nosey Spring	Geothermal springs	29	27	145	6
Mulyeo Springs	Geothermal springs	30	38	144	24
Native Dog Springs	Geothermal springs	29	32	145	49
Old Gerara Springs	Geothermal springs	29	17	146	23
Old Morton Plains Spring	Geothermal springs	29	5	146	45
Peery Springs	Geothermal springs	30	43	143	33
Picnic Sandhill Mudspring	Geothermal springs	29	8	144	40
Pullamonga Springs	Geothermal springs	29	31	145	17
Sandy Spring	Geothermal springs	29	10	146	35
Sweet Water Spring	Geothermal springs	29	26	145	43
Tanawanta Mud Springs	Geothermal springs	29	23	145	20
Tharnowanni Spring	Geothermal springs	29	9	145	14
Tharnowanni Spring	Geothermal springs	29	8	145	16
Thooroo Mud Springs	Geothermal springs	29	23	145	18
Thooroo Springs	Geothermal springs	29	22	145	23
Thully Spring	Geothermal springs	29	43	146	20

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Toooloomi Spring	Geothermal springs	29	12	146	35
Tynghynia Springs	Geothermal springs	29	13	145	42
Warroo Spring	Geothermal springs	29	4	144	38
Wee Wattah Spring	Geothermal springs	30	43	144	14
Yantabangee Spring	Geothermal springs	30	39	143	49
Yantabulla Spring	Geothermal springs	29	21	145	0
Yarranoganny Spring	Geothermal springs	29	28	145	46
Youngerina Springs	Geothermal springs	29	33	145	7

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Appendix 1: Location of maps

The maps in relation to this Plan may be inspected at:

1. Moree District Office
66-68 Frome Street
Moree NSW 2400

2. Dubbo District Office
209 Cobra Street
Dubbo NSW 2830

3. Condobolin District Office
7 Hay Street
Condobolin NSW 2877



NEW SOUTH WALES

Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008

under the

Water Management Act 2000

Pursuant to section 50 of the Water Management Act 2000, I, the Minister for Water, make the following Minister's plan.

NATHAN REES, MP
Minister for Water

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Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008

Part 1 Introduction

1 Name of this Plan

This Plan is the “Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008” (hereafter *this Plan*).

2 Nature and Status of this Plan

- (1) This Plan is made under section 50 (1A) of the *Water Management Act 2000* (hereafter *the Act*).
- (2) This Plan is a plan for water sharing, and covers the provisions of sections 20 (1), 20 (2) (a) to 20 (2) (e), 20 (3), 20 (4), 21 (a) to 21 (c) and 21 (f) of the Act and dispenses with section 16 of the Act.

3 Date of commencement

This Plan takes effect on 1 July 2008 and ceases 10 years after that date.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within part of the Upper North Coast Water Management Area, known as the Bellinger River Area Unregulated and Alluvial Water Sources (hereafter *these water sources*).
- (2) These water sources exclude the area of land below the mangrove limit.

Note. The 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).

5 Waters to which this Plan applies

- (1) These water sources in respect of which this Plan is made, and shown on the registered plan called The Bellinger River Area Unregulated and Alluvial Water Sources (Plan No. WSP 0002) held in the Department of Water and Energy’s Head Office, are:
 - (a) Bellinger River Water Source,
 - (b) Boggy Creek Water Source,
 - (c) Coastal Bellinger Water Source,

Note. This water source excludes alluvial groundwater downstream of the tidal limits.

- (d) Coastal Kalang Water Source,

Note. This water source excludes alluvial groundwater downstream of the tidal limits.

 Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008

(e) Dalhousie Creek Water Source,

(f) Hydes Creek Water Source,

Note. This water source excludes alluvial groundwater downstream of the tidal limits.

(g) Kalang River Water Source,

Note. This water source excludes alluvial groundwater downstream of the tidal limits.

(h) Never Never Creek Water Source,

(i) Rosewood Creek Water Source,

(j) Spicketts Creek Water Source, and

(k) Thora - North Arm Bellinger River Water Source.

Note. An overview of these water sources is shown in Appendix 1. Registered plans referred to in this Plan may be inspected at offices listed in Appendix 2.

- (2) The Thora - North Arm Bellinger River Water Source is divided into the following management zones and shown on the registered plan called The Bellinger River Area Unregulated and Alluvial Water Sources (Plan No. WSP 0002) held in the Department of Water and Energy's Head Office:
- (a) Upper Thora – North Arm Bellinger River Management Zone, and
- (b) Lower Thora – North Arm Bellinger River Management Zone.
- (3) The Bellinger River, Hydes Creek, Kalang River, Coastal Bellinger and Coastal Kalang Water Sources are divided into the following management zones:
- (a) Non Tidal Management Zone, and
- (b) Tidal Pool Management Zone.
- (4) The Minister may under section 45 (1) (b) of the Act amend subclauses (1), (2) and (3) to amend an existing water source or management zone, or establish a new or additional management zones.
- (5) Following an amendment to or the establishment of a water source, management zone or management zones under subclause (4) the registered plan called The Bellinger River Area Unregulated and Alluvial Water Sources (Plan No. WSP 0002) held in the Department of Water and Energy's Head Office may be amended.
- (6) The waters of these water sources include:
- (a) all water occurring on the land surface shown on the registered plan called The Bellinger River Area Unregulated and Alluvial Water Sources (Plan No. WSP 0002) held in the Department of Water and Energy's Head Office, including but not limited to all rivers, lakes and wetlands in these water sources, and

 Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008

- (b) all groundwater within all alluvial sediments below the surface of the land on the registered plan called The Bellinger River Area Unregulated and Alluvial Water Sources (Plan No. WSP 0002) held in the Department's Head Office, excluding:
- (i) any alluvial sediments downstream of the tidal limit, excluding the Bellinger River within the Bellinger River Water Source,

Note. This exclusion applies to part of the Hydes Creek, Kalang River, Coastal Bellinger and Coastal Kalang Water Sources.
 - (ii) any groundwaters contained in the coastal sands, and
 - (iii) any groundwater contained in fractured rock aquifers and basement rocks in the area to which this Plan applies.

Note. Alluvial groundwater and surface water in water sources with highly connected surface and groundwaters are treated as a single 'resource' within this Plan. Therefore, traditional management of groundwater via sustainable yield and extraction limits is not used within these water sources. Instead, management of surface and groundwater may be linked to surface water flow or groundwater levels. Note however, that this only applies to 'highly' connected alluvial groundwater. Alluvial groundwater that is not contained in the specified water sources is addressed under the Coastal Alluvial Groundwater Sharing Plan (*currently under development*).

6 Interpretation

- (1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.
- (2) Additional terms to those identified in subclause (1) are defined in Schedule 1.
- (3) Notes in the text of this Plan do not form part of this Plan.
- (4) Schedules to this Plan form part of this Plan.
- (5) Appendices to this Plan do not form part of this Plan.

7 Effect on licences, authorities and permits under the *Water Act 1912*

- (1) This Plan applies from the date of commencement to those matters that are administered under the Act at that time.
- (2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

8 State Water Management Outcomes Plan

This Plan is consistent with the State Water Management Outcomes Plan published in the Gazette on 20 December 2002 (hereafter *the SWMOP*) to the extent as described in Schedule 2.

Note. The State Water Management Outcomes Plan published in the Gazette on 20 December 2002 has expired and has not been replaced.

Part 2 Vision, objectives, strategies and performance indicators

9 Vision, objectives, strategies and performance indicators

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

10 Vision

The vision of this Plan is to provide healthy and enhanced water dependant ecosystems and equitable water sharing among users in the Bellinger River Area Unregulated and Alluvial Water Sources.

11 Objectives

The objectives of this Plan are to:

- (a) protect, preserve, maintain or enhance the important river flow dependent and high priority groundwater dependent ecosystems of these water sources,
- (b) protect, preserve, maintain or enhance the Aboriginal, cultural and heritage values of these water sources,
- (c) protect basic landholder rights,
- (d) manage these water sources to ensure equitable sharing between users,
- (e) provide opportunities for market based trading of access licences and water allocations within sustainability and system constraints,
- (f) provide sufficient flexibility in water account management to encourage responsible use of available water,
- (g) contribute to the maintenance of water quality,
- (h) provide recognition of the connectivity between surface water and groundwater, and
- (i) adaptively manage these water sources.

Note. For the purposes of the Inter-government Agreement on the National Water Initiative (2004) the environmental and other public benefit outcomes are:

1. the important river flow dependent environmental, Aboriginal, cultural and heritage values of these water sources are protected, preserved, maintained or enhanced,
2. these water sources are managed to ensure equitable sharing between users,
3. basic landholder rights of owners, or occupiers, of land are protected, and
4. the maintenance of water quality contributed to.

12 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,

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- (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, and
- (k) identify triggers for and limits to changes to the rules.

13 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (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 utilities access,
- (e) change in, or maintenance of, ecological value of key water sources and their dependent ecosystems,
- (f) extent to which basic landholder rights requirements have been met,
- (g) extent to which local water utility requirements have been met,
- (h) extent to which native title rights requirements have been met,
- (i) change in economic benefits derived from water extraction and use, and
- (j) extent of recognition of spiritual, social, economic and customary values of water to Aboriginal people.

Part 3 Basis for water sharing

14 Basis for water sharing

This Part is made in order to give effect to section 5 (3) of the Act, and in accordance with sections 20 (2) (a) and 20 (2) (c) of the Act.

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore river flow and groundwater level variability in these water sources.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of water in these water sources within the limits of water availability on a long-term average annual basis,
 - (b) the sharing of flows that occur in specified water sources on a daily basis, and
 - (c) water extraction to maintain groundwater dependent ecosystems.

16 Extraction management unit for these water sources

- (1) The availability of water for extraction from these water sources on a long-term average annual basis will be determined at the level of an extraction management unit.
- (2) The extraction management units of which these water sources are part are known as the Bellinger River Catchment Extraction Management Unit and the Dalhousie Creek Catchment Extraction Management Unit, and are shown on the registered plan called The Bellinger River Area Unregulated and Alluvial Water Sources (Plan No. WSP 0002) held in the Department of Water and Energy's Head Office.
- (3) The Bellinger River Catchment Extraction Management Unit consists of the following water sources:
 - (a) Bellinger River Water Source,
 - (b) Boggy Creek Water Source,
 - (c) Coastal Bellinger Water Source,
 - (d) Coastal Kalang Water Source,
 - (e) Hydes Creek Water Source,
 - (f) Kalang River Water Source,
 - (g) Never Never Creek Water Source,
 - (h) Rosewood Creek Water Source,
 - (i) Spicketts Creek Water Source, and
 - (j) Thora - North Arm Bellinger River Water Source.

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- (4) The Dalhousie Creek Catchment Extraction Management Unit consists of the Dalhousie Creek Water Source.

17 Flow reference point

- (1) For the purposes of this Plan all flows referred to relate to the estimated flows at the flow reference points for each water source or management zone, as shown on the registered plan called The Bellinger River Area Unregulated and Alluvial Water Sources (Plan No. WSP 0002) held in the Department of Water and Energy's Head Office, or as otherwise stated in this Plan.
- (2) The Minister may under Section 45 (1) (b) of the Act amend the flow reference point for the Boggy Creek Water Source, if following a hydrologic study the Very Low Flow Class is found to be less than visible flow at the end of the system under clause 18 (2) (a) of this Plan.
- (3) The Minister may under Section 45 (1) (b) of the Act amend the flow reference point for the Boggy Creek Water Source, following the establishment of a gauge for the B Class flows under clause 18 (2) (d) of this Plan.
- (4) The Minister may under Section 45 (1) (b) of the Act amend the flow reference point for the Coastal Bellinger Water Source, the Bellinger River Water Source, the Rosewood Creek Water Source, the Never Never Water Source and the Boggy Creek Water Source, if a gauge is installed downstream of the junction of the Bellinger River and Roses Creek, and the site is found suitable as a flow reference point for the individual water sources under clause 18 (2) (b) of this Plan.
- (5) The registered plan called The Bellinger River Area Unregulated and Alluvial Water Sources (Plan No. WSP 0002) held in the Department Water and Energy's Head Office may be amended by the Minister under section 45 (1) (b) of the Act as a result of the establishment of, or changes to, flow reference points under subclauses (2), (3) and (4), and clause 18 (2) of this Plan.

18 Flow classes for these water sources

- (1) This Plan establishes the following flow classes as the basis for sharing of daily flows from these water sources:

Note. The following flow classes apply to all access licences extracting from surface water specified for each water source from the commencement date of this Plan, excluding those access licences listed under clause 64 and access licences that nominate a runoff harvesting work. They will also apply to all existing aquifer access licence holders extracting from alluvial aquifers within 40 metres of the high bank of the river from year six of this Plan, except where provided for under clause 65 (2) of this Plan. For those aquifer access licences outside the 40 metres daily flow classes will not apply.

- (a) for the Non Tidal Management Zone of the Bellinger River Water Source, at the Bellinger River gauge at Thora in the Thora - North Arm Bellinger River Water Source:
- (i) the Very Low Flow Class is when flows are at or below 16 megalitres per day (hereafter *ML/day*),
- Note.** 16 ML/day corresponds to the estimated 95th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
- (ii) A Class is when flows are greater than 16 ML/day and less than 95 ML/day, and
- Note.** 95 ML/day corresponds to the estimated 50th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
- (iii) B Class is when flows are equal or greater than 95 ML/day,

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Note. B Class relates to unregulated river (Aboriginal commercial) access licences.

Note. These flow classes may be amended if a gauging station is installed within or close to the water source, in accordance with clause 18 (2) (b) of this Plan.

- (b) for the Tidal Pool Management Zone of the Bellinger River Water Source, at the Bellinger River gauge at Thora in the Thora - North Arm Bellinger River Water Source:
- (i) the Very Low Flow Class is when flows are at or below 16 ML/day,
Note. 16 ML/day corresponds to the estimated 95th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
- (ii) A Class is when flows are greater than 16 ML/day and less than 95 ML/day, and
Note. 95 ML/day corresponds to the estimated 50th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
- (iii) B Class is when flows are equal or greater than 95 ML/day,

Note. B Class relates to unregulated river (Aboriginal commercial) access licences.

Note. These flow classes may be amended if a gauging station is installed within or close to the water source, in accordance with clause 18 (2) (b) of this Plan.

Note. These flow classes may be amended during the life of this Plan based on the outcome of a review of existing hydrological and ecological studies, and salinity monitoring, in accordance with clause 18 (2) (f) of this Plan.

- (c) for the Boggy Creek Water Source, at the Bellinger River gauge at Thora in the Thora - North Arm Bellinger River Water Source:
- (i) the Very Low Flow Class is when flows are at or below 16 ML/day, and
Note. 16 ML/day corresponds to the estimated 95th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
- (ii) A Class is when flows are greater than 16 ML/day,
Note. These flow classes may be amended based on the outcomes of a hydrological study of end of system flows, in accordance with clause 18 (2) (a) of this Plan.
Note. These flow classes may be amended if a gauging station is installed within or close to the water source, in accordance with clause 18 (2) (b) of this Plan.
Note. These flow classes may be amended if an unregulated river (aboriginal commercial) access licence is granted in this water source, in accordance with clause 18 (2) (d) and 18 (2) (e) of this Plan.
- (d) for the Non Tidal Management Zone of the Coastal Bellinger Water Source, no flow classes are established for this Plan,
- (e) for the Tidal Pool Management Zone of the Coastal Bellinger Water Source, at the Bellinger River gauge at Thora in the Thora - North Arm Bellinger River Water Source:
- (i) the Very Low Flow Class is when flows are at or below 16 hereafter ML/day,
Note. 16 ML/day corresponds to the estimated 95th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
- (ii) A Class is when flows are greater than 16 ML/day and less than 95 ML/day, and
Note. 95 ML/day corresponds to the estimated 50th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.

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(iii) B Class is when flows are equal or greater than 95 ML/day,

Note. B Class relates to unregulated river (Aboriginal commercial) access licences.

Note. These flow classes may be amended if a gauging station is installed within or close to the water source, in accordance with clause 18 (2) (b) of this Plan.

Note. These flow classes may be amended during the life of this Plan based on the outcome of a review of existing hydrological and ecological studies, and salinity monitoring, in accordance with clause 18 (2) (f) of this Plan.

(f) for the Non Tidal Management Zone of the Coastal Kalang Water Source, no flow classes are established for this Plan,

Note. Flow classes may be established if an unregulated river (aboriginal commercial) access licence is granted in this water source, in accordance with clause 18 (2) (e) of this Plan.

(g) for the Tidal Pool Management Zone of the Coastal Kalang Water Source, at the Sunny Corner Road crossing in the Kalang River Water Source:

(i) for the first five years of this Plan, the Very Low Flow Class is when flows are at or below 2 ML/day, thereafter the Very Low Flow Class is when flows are at or below 4 ML/day,

Note. 2 ML/day corresponds to the estimated 99.5th percentile and 4 ML/day corresponds to the estimated 98th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.

(ii) for the first five years of this Plan, A Class is when flows are greater than 2 ML/day, thereafter A Class is when flows are greater than 4 ML/day,

Note. These flow classes may be amended if an unregulated river (aboriginal commercial) access licence is granted in this water source, in accordance with clause 18 (2) (e) of this Plan.

Note. These flow classes may be amended during the life of this Plan based on the outcome of a review of existing hydrological and ecological studies, and salinity monitoring, in accordance with clause 18 (2) (f) of this Plan.

(h) for the Dalhousie Creek Water Source, no flow classes are established for this Plan,

(i) for the Non Tidal and Tidal Pool Management Zones of the Hydes Creek Water Source, at Kethels Road bridge:

(i) the Very Low Flow Class is when flows are at or below 1 ML/day, and

Note. 1 ML/day corresponds to the estimated 95th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.

(ii) A Class is when flows are greater than 1 ML/day,

Note. These flow classes may be amended if an unregulated river high flow access licence or unregulated river (aboriginal commercial) access licence is granted in this water source, in accordance with clause 18 (2) (e) of this Plan.

Note. These flow classes may be amended during the life of this Plan based on the outcome of a review of existing hydrological and ecological studies, and salinity monitoring, in accordance with clause 18 (2) (f) of this Plan.

(j) for the Non Tidal and Tidal Pool Management Zones of the Kalang River Water Source, at the Sunny Corner Road crossing:

(i) for the first five years of this Plan, the Very Low Flow Class is when flows are at or below 2 ML/day, thereafter the Very Low Flow Class is when flows are at or below 4 ML/day,

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Note. 2 ML/day corresponds to the estimated 99.5th percentile and 4 ML/day corresponds to the estimated 98th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.

- (ii) for the first five years of this Plan, A Class is when flows are greater than 2 ML/day, thereafter A Class is when flows are greater than 4 ML/day,
- (k) for the Never Never Creek Water Source, at Promised Land Loop Road, immediately upstream of the Arthur Keogh Reserve:
 - (i) the Very Low Flow Class is when flows are at or below 2 ML/day, and

Note. 2 ML/day corresponds to the estimated 95th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
 - (ii) A Class is when flows are greater than 2 ML/day,

Note. These flow classes may be amended if a gauging station is installed within or close to the water source, in accordance with clause 18 (2) (b) of this Plan.

Note. These flow classes may be amended if an unregulated river high flow access licence is granted in this water source, in accordance with clause 18 (2) (e) of this Plan.
- (l) for the Rosewood Creek Water Source, at the Bellinger River gauge at Thora in the Thora - North Arm Bellinger River Water Source:
 - (i) the Very Low Flow Class is when flows are at or below 16 ML/day, and

Note. 16 ML/day corresponds to the estimated 95th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
 - (ii) A Class is when flows are greater than 16 ML/day,

Note. These flow classes may be amended if a gauging station is installed within or close to the water source, in accordance with clause 18 (2) (b) of this Plan.
- (m) for the Spicketts Creek Water Source, no flow classes are established for this Plan, and

Note. Flow classes may be established if an unregulated river (aboriginal commercial) access licence is granted in this water source, in accordance with clause 18 (2) (e) of this Plan.
- (n) for the Thora - North Arm Bellinger River Water Source, at the Bellinger River gauge at Thora:
 - (i) the Very Low Flow Class is when flows are at or below 16 ML/day, and

Note. 16 ML/day corresponds to the estimated 95th percentile. The percentiles refer to lowest flow month at the gauge and include all days of record.
 - (ii) A Class is when flows are greater than 16 ML/day.
- (2) The Minister may under section 45 (1) (b) of the Act amend subclauses (1) (a), (1) (b), (1) (c), (1) (e), (1) (f), (1) (g), (1) (i), (1) (j), (1) (k), (1) (l) and (1) (m) to amend or establish a new or additional flow class or flow classes in:
 - (a) the Boggy Creek Water Source, if following a hydrologic study the bottom of A Class is found to be less than visible flow at the end of the system, then the flow classes will change to ensuring extraction of water from a river by an approved water supply work is permitted if there is a visible flow in the river in the downstream vicinity of the water supply work, or where water is being taken from a pool, a visible inflow and outflow to and from that pool,

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- (b) the Tidal Pool Management Zone of the Coastal Bellinger Water Source, the Bellinger River Water Source, the Rosewood Creek Water Source, the Never Never Water Source and the Boggy Creek Water Source, if a gauge is installed near the junction of the Bellinger River and Roses Creek and sufficient data collection to enable determination of a cease to pump level at the flow reference point at or below the equivalent to the 95th percentile flow at the end of the system,
- (c) the Coastal Bellinger and the Coastal Kalang Water Sources if a Drainage Management Plan, Floodplain Management Plan or similar management plan is developed for all or part of the water sources,
- (d) the Boggy Creek Water Source, if an unregulated river (Aboriginal commercial) access licence is granted under clause 35 (2) (f), a gauge may be installed in Boggy Creek and calibrated to the equivalent of a flow that is equal to the 50th percentile daily flow for the B Class,

Note. The percentiles refer to lowest flow month at the gauge and include all days of record.

- (e) the Boggy Creek Water Source, the Coastal Kalang Water Source, the Hydes Creek Water Source, the Never Never Creek Water Source and the Spicketts Creek Water Source, if an unregulated river access licence is converted to an unregulated river high flow access licence under clause 74 (2), or an unregulated river (Aboriginal commercial) access licence is granted under clause 35 (2) (f), such that B Class is when flows are greater than a flow that is equal to the 50th percentile daily flow, and

Note. The percentiles refer to lowest flow month at the gauge and include all days of record.

- (f) the Tidal Pool Management Zones of the Bellinger River, the Coastal Bellinger, the Coastal Kalang and the Hydes Creek Water Sources, during the life of this Plan, based on a review of salinity monitoring, and ecological and hydrological studies to determine whether the Very Low Flow Classes are under or over satisfying ecological needs in the tidal pool, with a range in variation between visible flow and the 95th percentile at the nominated flow reference point or a salinity threshold equivalent.

19 Determination of flow management

Where flow gauging stations are being used to determine daily flow classes, announcement of the flow class may be made by the Minister from time to time.

Part 4 Environmental water provisions

20 Environmental water provisions

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (1A), 8 (2), 8 (4), 8A, 8B, 8C, 8D, 8E and 20 (1) (a) of the Act.

21 Planned environmental water

- (1) Planned environmental water is identified and established in these water sources as follows:
 - (a) water volume in excess of the respective long-term average annual extraction limit established in clause 42 of this Plan may not be taken and used for any purpose in these water sources, thereby protecting a proportion of river flows for fundamental ecosystem needs from increases in long-term water extraction, and
 - (b) for all water sources, the water remaining in the water source after taking water to meet basic landholder rights and for access licences in accordance with the rules identified in clause 21 (3).
- (2) The planned environmental water established in clause 21 (1) (a) for these water sources is maintained by the rules in clause 44 that limit the availability of water for extraction under access licences, thereby protecting a proportion of natural river flows for fundamental ecological needs from increases in long-term water extraction.
- (3) The planned environmental water established in clause 21 (1) (b) is maintained as follows:
 - (a) in management zones or water sources with a Very Low Flow Class, the holders of access licences, excluding access licences listed in Schedule 3, aquifer access licences under clause 65 (1) and 65 (3) and access licences under clause 65 (7) of this Plan, and access licences that nominate a runoff harvesting work, are not permitted to take water when flows are within the Very Low Flow Class,
 - (b) in all water sources, excluding access licences listed in Schedule 3, aquifer access licences under clause 65 (1) and 65 (3) and access licences under clause 65 (7) of this Plan and access licences that nominate a runoff harvesting work, notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted:
 - (i) if there is a visible flow in the river in the downstream vicinity of the water supply work, or
 - (ii) where water is being taken from a pool, a visible inflow and outflow to and from that pool,
 - (c) in the Bellinger River Water Source, excluding access licences listed in Schedule 3, aquifer access licences under clause 65 (1) and 65 (3) and access licences under clause 65 (7) of this Plan, and access licences that nominate a runoff harvesting work, notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted for no more than 8 hours per day, when the flow at the Bellinger River Gauge at Thora is greater than 16 ML/day and less than or equal to 32 ML/day,

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- (d) in the Hydes Creek Water Source, excluding access licences listed in Schedule 3, aquifer access licences under clause 65 (1) and 65 (3) and access licences under clause 65 (7) of this Plan, and access licences that nominate a runoff harvesting work, notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted for no more than 8 hours per day, when the flow at the Hydes Creek Gauge at Kethels Road bridge is greater than 1 ML/day and less than or equal to 4 ML/day, and
 - (e) in the Never Never Water Source, excluding access licences listed in Schedule 3, aquifer access licences under clause 65 (1) and 65 (3) and access licences under clause 65 (7) of this Plan, and access licences that nominate a runoff harvesting work, notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted for no more than 8 hours per day, when the flow in the Never Never Creek at Promised Land Loop Road, immediately upstream of the Arthur Keogh Reserve is greater than 2 ML/day and less than or equal to 9 ML/day.
- (4) Following the establishment or amendment of a flow class or flow classes within the the Bellinger River Water Source, the Boggy Creek Water Source, the Coastal Bellinger Water Source, the Coastal Kalang Water Source, the Hydes Creek Water Source, the Kalang River Water Source, the Never Never Creek Water Source and the Spicketts Creek Water Source under clause 18 (2) of this Plan, the Minister may under section 45 (1) (b) of the Act, amend subclauses (1), (2) and (3) to identify, establish and maintain planned environmental water in the relevant water source.

22 Adaptive environmental water

- (1) Water may be committed in these water sources for environmental purposes by an adaptive environmental water condition imposed on an access licence, pursuant to sections 8, 8B, 8C, 8D and 8E of the Act.
- (2) The holder of an access licence may request that the Minister impose an adaptive environmental water condition in respect of the whole or a part of the share component of the access licence.
- (3) The condition imposed under subclause (2) will continue until the holder requests its removal in writing, and the condition is revoked by the Minister, pursuant to section 8B (2) of the Act.
- (4) An access licence may be granted in these water sources, pursuant to section 8C of the Act, by the Minister to the Minister, a catchment management authority or other public body, without the need for an application to be made for the licence in accordance with Part 2 of Chapter 3 of the Act, so long as:
 - (a) works or other actions result in water savings in the system being made in the water source, and
 - (b) the share component of the access licence is equal to the value of water savings made in the system, and
 - (c) an adaptive environmental water condition is imposed on the access licence and the condition is not removed,

where 'system' means that part of the water source that is not identified by this Plan for commitments to basic landholder rights and for sharing and extraction under any other rights.

- (5) The Minister may keep an access licence surrendered by the holder of the licence or transfer it to a catchment management authority or other public body, and may change the licence to a different category or subcategory, if:

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- (a) the licence has been surrendered as a result of water savings made by any means (for example, works or other improvements or recycling), and
 - (b) the share component of the licence is equal to the value of the savings made, and
 - (c) an adaptive environmental water condition is imposed on the access licence and the condition is not removed.
- (6) An adaptive environmental water condition is a mandatory condition and the terms of an adaptive environmental water condition specified in subclause (1):
 - (a) are to be imposed by the Minister or Minister's delegate, and
 - (b) are to be specified on the access licence, and
 - (c) shall further the objectives of this Plan.
- (7) The allocation of water for access licences with an adaptive environmental water condition will be in accordance with the available water determination made for the relevant category of access licence under this Plan.
- (8) If the adaptive environmental water condition on an access licence requires the water to be left in the water source for environmental purposes, then the water allocation account is to be debited when the water is available in accordance with the adaptive environmental water condition on the access licence.
- (9) If the adaptive environmental water condition requires the environmental water to be taken from the water source, then the water allocation account is to be debited when it is taken.
- (10) For the purposes of auditing compliance with the long-term average annual extraction limit under this Plan, the delivery of water pursuant to an access licence with an adaptive environmental water condition:
 - (a) in the case of a licence arising under subclause (4), shall not be accounted for as extraction where it occurs, and
 - (b) in the case of a licence arising under subclause (2) or subclause (5), shall be accounted for as extraction where it occurs.
- (11) To the extent that the water allocation of an access licence which is subject to an adaptive environmental water condition is not required to meet the requirement of the adaptive environmental water condition, it may be the subject of an assignment dealing in accordance with the Dealings Rules in Part 12 of this Plan.
- (12) Notwithstanding subclause (11), an access licence with an adaptive environmental water condition may be the subject of any other dealing permitted by the Dealing Rules in this Plan, provided the benefit to the environment provided for in the adaptive environmental water condition is not diminished.
- (13) At the commencement of this clause, there were no access licences with an adaptive environmental water condition in these water sources.

Part 5 Basic landholder rights

23 Basic landholder rights

- (1) This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.
- (2) Basic landholders rights exercised under section 52 of the Act must be exercised in accordance with any guidelines established by the Minister with respect to the reasonable use of water for domestic consumption and stock watering by landholders authorised to use water for either or both of those purposes.

Note. The Minister may issue a direction under section 328 of the Act to restrict the exercise of basic landholder rights from these water sources.

Note. Water from these water sources should not be consumed without prior treatment that is adequate to ensure its safety. Land use activities may have polluted the groundwater in some areas.

24 Domestic and stock rights

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights within these water sources are estimated to total 3.6 megalitres per day (hereafter *ML/day*) and are distributed as follows:
 - (a) 0.4 ML/day in the Bellinger River Water Source,
 - (b) 0.1 ML/day in the Boggy Creek Water Source,
 - (c) 0.8 ML/day in the Coastal Bellinger Water Source,
 - (d) 0.6 ML/day in the Coastal Kalang Water Source,
 - (e) 0.1 ML/day in the Dalhousie Creek Water Source,
 - (f) 0.1 ML/day in the Hydes Creek Water Source,
 - (g) 0.5 ML/day in the Kalang River Water Source,
 - (h) 0.1 ML/day in the Never Never Creek Water Source,
 - (i) 0.1 ML/day in the Rosewood Creek Water Source,
 - (j) 0.1 ML/day in the Spicketts Creek Water Source, and
 - (k) 0.7 ML/day in the Thora - North Arm Bellinger River Water Source.

- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note. Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in these water sources and/or as a result of the increase in the exercise of basic landholder rights by existing landholders.

Note. Increase in use of domestic and stock rights may also occur as a result of an increase in the number of landholdings overlying the alluvial groundwater through subdivision and/or as a result of the increase in the exercise of basic landholder rights by existing landholders.

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Note. The Minister may limit new domestic and stock rights in new subdivisions in any water source by regulation under section 52 (2) of the Act.

25 Native title rights

- (1) At the commencement of this Plan there are no native title rights in these water sources and therefore the water requirements for native title rights total 0 ML/year.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note. An increase in native title rights may occur as a result of the granting of native title rights under the Commonwealth's *Native Title Act 1993*.

26 Harvestable rights

The requirement for water under harvestable rights is the amount of water owners of land are entitled to capture pursuant to a harvestable rights order made under section 54 of the Act and published from time to time in the NSW Government Gazette.

Part 6 Bulk access regime

27 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) 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 provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):
 - (a) recognises the effect of climate variability on the availability of water as provided for under Part 3 of this Plan,
 - (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,
 - (c) recognises and is consistent with limits to the availability of water as provided for in Part 10, Division 1 of this Plan,
 - (d) establishes rules according to which available water determinations are to be made as provided for in Part 10, Division 1 of this Plan,
 - (e) establishes rules according to which access licences are managed as provided for in Parts 10 and 11 of this Plan, and
 - (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Part 10 of this Plan.

Part 7 Requirements for water under access licences

28 Requirements for water under access licences

This Part is made in accordance with section 20 (1) (c) of the Act.

Note. The amount of water specified in this Part represents the total volumes or unit shares specified in the share components on access licences in these water sources. The actual volumes of water available at any time will depend on climate, access licence priority and the rules in this Plan.

29 Share component of domestic and stock access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of domestic and stock access licences authorised to extract water from these water sources will total 128 megalitres per year (hereafter *ML/year*), distributed as follows:

- (a) 14 ML/year in the Bellinger River Water Source,
- (b) 4 ML/year in the Boggy Creek Water Source,
- (c) 2 ML/year in the Coastal Bellinger Water Source,
- (d) 0 ML/year in the Coastal Kalang Water Source,
- (e) 26 ML/year in the Dalhousie Creek Water Source,
- (f) 1 ML/year in the Hydes Creek Water Source,
- (g) 0 ML/year in the Kalang River Water Source,
- (h) 15 ML/year in the Never Never Creek Water Source,
- (i) 3 ML/year in the Rosewood Creek Water Source,
- (j) 0 ML/year in the Spicketts Creek Water Source, and
- (k) 63 ML/year in the Thora - North Arm Bellinger River Water Source.

30 Share component of local water utility access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of local water utility access licences authorised to extract water from these water sources will total 1,613 ML/year, distributed as follows:

- (a) 1,613 ML/year in the Bellinger River Water Source,
- (b) 0 ML/year in all other water sources.

31 Share component of unregulated river access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of unregulated river access licences authorised to extract water from these water sources will total 2,993 unit shares, distributed as follows:

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- (a) 1,011 unit shares in the Bellinger River Water Source,
- (b) 20 unit shares in the Boggy Creek Water Source,
- (c) 90 unit shares in the Coastal Bellinger Water Source,
- (d) 124 unit shares in the Coastal Kalang Water Source,
- (e) 191 unit shares in the Dalhousie Creek Water Source,
- (f) 429 unit shares in the Hydes Creek Water Source,
- (g) 18 unit shares in the Kalang River Water Source,
- (h) 723 unit shares in the Never Never Creek Water Source,
- (i) 11 unit shares in the Rosewood Creek Water Source,
- (j) 7 unit shares in the Spicketts Creek Water Source, and
- (k) 369 unit shares in the Thora - North Arm Bellinger River Water Source.

32 Share component of unregulated river high flow access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of unregulated river high flow access licences authorised to extract water from these water sources will total 0 unit shares, distributed as follows:

- (a) 0 unit shares in the Never Never Water Source, and
- (b) 0 unit shares in the Hydes 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.

33 Share component of aquifer access licences

It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the share components of aquifer access licences authorised to extract water from these water sources will total 228 unit shares, distributed as follows:

- (a) 70 unit shares in the Bellinger River Water Source,
- (b) 0 unit shares in the Boggy Creek Water Source,
- (c) 19 unit shares in the Coastal Bellinger Water Source,
- (d) 0 unit shares in the Coastal Kalang Water Source,
- (e) 0 unit shares in the Dalhousie Creek Water Source,
- (f) 120 unit shares in the Hydes Creek Water Source,

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- (g) 3 unit shares in the Kalang River Water Source,
- (h) 6 unit shares in the Never Never Creek Water Source,
- (i) 0 unit shares in the Rosewood Creek Water Source,
- (j) 0 unit shares in the Spicketts Creek Water Source, and
- (k) 10 unit shares in the Thora - North Arm Bellinger River Water Source.

Note. The total share components for aquifer access licences specified in these water sources could be higher as a result of additional share components for unidentified aquifer access licences in the alluvial groundwater.

34 Changes to total share components

This Plan recognises that the total requirements for water for extraction within these water sources may change during the term of this Plan as a result of:

- (a) the granting, surrender or cancellation of access licences,
- (b) the granting, surrender or cancellation of access licences through a dealing under Part 12 of this Plan, and
- (c) the variation of local water utility licences under section 66 of the Act.

Note. The total share components identified in this Part may also change due to volumetric conversion of Water Act licenses that are currently non-volumetric.

Part 8 Rules for granting access licences

35 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b), 61 and 63 of the Act, having regard to the limits to water availability in these water sources and the need to protect dependent ecosystems.
- (2) Applications for access licences may be made and access licences granted in these water sources, if the application is for:
 - (a) a specific purpose access licence for which application is provided for under clause 19 of the Water Management (General) Regulation 2004 (hereafter *the Regulation*) in accordance with section 61 (1) (a) of the Act,

Note. At the commencement of this Plan, clause 19 of the Regulation provides for the following specific purpose access licences to be applied for:

- (i) a local water utility access licence (subcategory "domestic and commercial"), for the purpose of domestic consumption and commercial activities,
- (ii) a domestic and stock access licence (subcategory "domestic"), for the purpose of domestic consumption,
- (iii) an unregulated river access licence (subcategory "town water supply"), for the purpose of supply to communities for domestic consumption and commercial activities,
- (iv) an aquifer access licence (subcategory "town water supply"), for the purpose of supply to communities for domestic consumption and commercial activities, and
- (v) any category of specific purpose access licence (subcategory "Aboriginal cultural"), for Aboriginal cultural purposes.

Note. Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's share component at 5 year intervals, or on application of the local water utility where there is rapid growth in population.

- (b) an access licence with a zero share component in accordance with sections 61 (1) (b) and 63 (5) of the Act,
- (c) an access licence that may be granted in accordance with a dealing that is permitted by Part 12 of this Plan,

Note. Dealings include the conversion of unregulated river access licences to unregulated river high flow access licences as specified in clause 74 of this Plan.
- (d) any category of specific purpose access licence (Aboriginal cultural), for Aboriginal cultural purposes, up to 10 ML/year per application,
- (e) an unregulated river access licence, or domestic and/or stock access licence in the tidal pool management zone where a history of extraction in the tidal pool management zone can be demonstrated prior to the 30 June 2006, and
- (f) an unregulated river (Aboriginal commercial) access licence, that can extract water from B Class flows only, has no more than minimal harm at the water source level impact assessment and provided no more than the following total unregulated river (Aboriginal

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commercial) access licence share component has ever been issued or will cause the following total share component to be exceeded, in the respective water sources:

- (i) 500 unit shares in the Bellinger River Water Source,
- (ii) 91.5 unit shares in the Boggy Creek Water Source,
- (iii) 500 unit shares in the Coastal Bellinger Water Source,
- (iv) 500 unit shares in the Coastal Kalang Water Sources,
- (v) 183 unit shares in the Hydes Creek Water Source, and
- (vi) 146.4 unit shares in the Spicketts Creek Water Source.

Note. Approval for granting of an unregulated river (Aboriginal commercial) access licence will be subject to assessment of the application in regard to the level of impact of the proposed extraction. This should include consideration of the potential impact on high flow (eg flows greater than the 50th percentile flow) values, and any potential impact on the water source as a whole.

Note. An unregulated river (Aboriginal commercial) access licence will not be fully commercial. Allocations under these licences will be able to be traded to non-Aboriginal people however the licence 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 fully commercial licences. For these reasons, in line with interagency agreement the Department proposes to amend the access licence sub category 'Aboriginal Commercial' to 'Aboriginal Community Development' in the *Water Management Act 2000 Regulation*.

- (3) Licences under subclause 2 (e) can only be granted to those water users previously exempted from requiring a Water Act licence.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstance relating to that access licence, and that the share component sought will be the minimum required to meet that purpose and circumstance.
- (5) Subclause (4) does not apply to a new access licence arising from:
 - (a) section 61 (1) (c), of the Act, where the right has been acquired by auction, tender or other open market process, or
 - (b) an access licence dealing, or
 - (c) subclause 2 (e).
- (6) Where total daily extraction limits have been established in a water source, any new access licence granted in the water sources, in accordance with this clause must have a share component within the respective total daily extraction limit initially assigned.
- (7) Where flow classes have not been established in a water source, any new access licence granted in the water sources, in accordance with subclause (2) (a) shall only be permitted to take water when flows exceed a level to be determined by the Minister and specified on the access licence.

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Part 9 Rules for granting and amending water supply works approvals

36 Granting and amending water supply works approvals

This Part is made in accordance with sections 21 (b) and 21 (e) of the Act.

37 Runoff harvesting dams

- (1) New or expanded runoff harvesting dams shall, in addition to other considerations, be subject to the dam capacity not exceeding that which is consistent with the access licence share component specifying the runoff harvesting dam as the nominated work.
- (2) When the share component of an access licence that nominates an approval for a runoff harvesting dam is reduced either by the Minister, or on application of the approval holder, or by an assignment in accordance with Part 12 of this Plan, the Minister shall impose an additional condition requiring the dam to be modified so as to reduce its capacity, or requiring the water taken and evaporated from the dam to be reduced, consistent with the reduction in share component.

Note. Extraction of water from a runoff harvesting dam requires an unregulated river access licence nominating an approval for a runoff harvesting dam, unless the runoff harvesting dam is within the maximum harvestable right dam capacity for the property on which it is located, in which case no licences or approvals are required.

Note. Following the assignment of water allocations from a water allocation account of an access that nominates an approval for a runoff harvesting dam, the Minister may impose conditions requiring that runoff harvesting dam by-pass flows.

38 In-river dams

The Minister may consider applications for in-river dams within these water sources consistent with the principles of the *Water Management Act 2000*.

Note. The practice of approving in-river dams is not endorsed and will only be considered under exceptional circumstances and in line with current legislation and policy.

Note. Taking of water from an in-river dam requires an access license unless it is taken in accordance with section 52 of the Act (domestic and stock rights). In either case, however, the dam requires a water management works approval unless exempted by regulation under the Act. All new or modified in-river dams will also require assessment under the Fisheries Management Act 1994.

Note. A review of the limitations on the establishment of dams on 3rd order streams is to be undertaken. This may result in amendment to the state-wide regulatory order and application across water sharing plans.

39 Rules for granting or amending water supply works (bore) approvals

- (1) This clause is made in accordance with sections 21 (c) and 21 (e) of the Act, to minimise extraction interference between neighbouring bores and to ensure minimal harm to groundwater and their dependent ecosystems.

Note. Extracting groundwater results in the draw down of water levels in the vicinity of the extraction. It is important to manage these local effects. Extraction may result in unacceptable water level declines in other works/bore close by, increasing the pumping costs associated with this extraction, or even cutting off supply altogether. It may interfere with the results of the regional water level monitoring undertaken by the Department. It may also lower the water levels in groundwater dependent ecosystems and cultural features close by. Finally, it may mobilise contaminated groundwater in the area, drawing it towards to

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point of extraction. It is important, therefore, to manage the location at which groundwater is extracted to minimise these local impacts. This is achieved in this clause by applying minimum distance condition to works.

- (2) To minimise interference between authorised extraction in these water sources, the Minister shall not grant an approval under section 95 of the Act, amend an approval under section 107 of the Act, or consent to a nomination of a work under section 71W of the Act, where a water supply work (bore) is proposed to be located within:
- (a) 200 metres of an approved water supply work (bore) nominated by another access licence,
 - (b) 200 metres of an approved water supply work (bore) from which basic landholder rights water is being extracted,
 - (c) 100 metres from the property boundary, unless negotiated with a neighbour for a lesser distance
 - (d) 500 metres from an approved water supply works (bore) from local water utility/major utility, and
 - (e) 100 metres from a Department's observation or monitoring bore, unless negotiated with the Department of Water and Energy for a lesser distance.

Note. The distance conditions in this clause apply to new or amended approvals. That is, when the applicant wants to construct a new water supply work (bore), and add it to an existing approval. The distance conditions also apply when the licence holder wants to nominate new or different works on the licence.

- (3) The distance restrictions specified in subclause (2) does not apply where:
- (a) the application relates to a work solely for the purpose of exercising basic landholder rights, or
 - (b) the application is for a replacement bore.
- (4) The distance restrictions specified in subclause (2) may be amended by the Minister if:
- (a) a hydrogeological study undertaken by the applicant, and assessed as adequate by the Minister, demonstrates minimal potential for adverse impacts on existing authorised extraction,
 - (b) all potentially affected access licence or approval holders have been notified by the proponent, and
- Note.** Potentially affected access licence holders are typically neighbouring access licence or approval holders and those in the near vicinity.
- (c) there is a process for remediation in the event that any adverse impact occurs in the future, specified as conditions on the access licence.
- (5) Pursuant to section 45 (1) (b) of the Act, the Minister may add to or vary the distance restriction in subclause (2) to minimise the interference between authorised extraction after year 5 of this Plan or if the Minister identifies the need for further restrictions in a local impact area established under Division 4 Part 11 of this Plan.

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- (6) The Minister shall not grant an approval under section 95 of the Act, amend an approval under section 107 of the Act, or consent to a nomination of a work under section 71W of the Act, where a water supply work (bore) is proposed to be located within:
- (a) 100 metres of a contamination source as listed in Schedule 4, unless the proponent can demonstrate to the Minister's satisfaction that a lesser distance will result in no more than minimal harm to the water source, and that extraction will not impact on the environment or cause a threat to public health as advised by the Minister for Health, or
 - (b) a greater distance than in subclause (a) that the Minister nominates in order to ensure that no more than minimal harm will occur to the groundwater source, and that extraction will not impact on the environment or cause a threat to public health as advised by the Minister for Health.
- (7) Extraction of groundwater from a new water supply work (bore) for any purpose between 100 metres and 500 metres of a contamination source as listed in Schedule 4, will require:
- (a) an application to the Minister by the licence holder providing evidence that no drawdown of the groundwater within 100 metres of a contamination source will occur,
 - (b) the Minister to assess the application as adequate, and
 - (c) the Minister to approve the application.
- (8) Subclauses (6) and (7) may be applied by the Minister in relation to contamination sources not on Schedule 4, based on the results of a site inspection or other relevant information provided to the Minister.
- (9) Pursuant to section 45 (1) (b) of the Act, the Minister may vary Schedule 4 by inclusion or deletion of a contamination source based on the results of a site inspection or other relevant information provided to the Minister on that contamination source.
- (10) Unless the application is for a replacement water supply work (bore) that is part of a bore network for a local water utility or town water supply, the Minister shall not grant a new approval under section 95, or an amended approval under section 107, or consent to a nominated work under section 71W in these water sources, if it would result in a water supply work (bore) being authorised to extract water:
- (a) for basic landholders rights only, within 100 metres of a high priority groundwater dependent ecosystems, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 5, or
 - (b) from an access licence, within 200 metres of a high priority groundwater dependent ecosystems, excluding high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 5, or
 - (c) within 500 metres of a high priority karst environment groundwater dependent ecosystems, listed in and shown on the maps in Schedule 5, or
 - (d) within 40 metres of the top of the high bank of any third order or above stream, or lagoon, or
 - (e) within 40 metres of first and second order stream, unless the water supply work (bore) is drilled into the underlying parent material, and the slotted intervals of the works commences deeper than 30 metres.

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Note. Subclause (10) will not apply to current authorised extraction from an existing water supply work (bore) at current or equal share component.

- (11) The distance restrictions specified in subclauses (10) (a) and (10) (b) may be amended by the Minister if:
 - (a) a hydrogeological study undertaken by the applicant, and assessed as adequate by the Minister, and
 - (b) an application to the Minister by the licence holder providing evidence that no drawdown of the groundwater at the outside edge of the perimeter of the groundwater dependent ecosystem in Schedule 5.
- (12) The restrictions specified in subclause (10) (e) on the drilling into the underlying parent material and the depth of slotted intervals may be amended by the Minister if the applicant can demonstrate, to the satisfaction of the Minister, that the water supply work (bore) will have minimal impact on base flows in the stream.
- (13) Subclause 10 (d) and 10 (e) does not apply to a new water supply works (bore) required as part of a dealing involving the conversion of an unregulated river access licence to an aquifer access licence under section 71O of the Act and clause 74 of this Plan.
- (14) Pursuant to section 45 (1) (b) of the Act, the Minister may amend the exclusion distances in subclauses (10) based on the outcomes of further studies of groundwater ecosystem dependency undertaken or assessed by the Minister.
- (15) Pursuant to section 45 (1) (b) of the Act, the Minister may identify further high priority groundwater dependent ecosystems and include them in Schedule 5 after year 5 of the Plan, based on further studies of groundwater ecosystem dependency undertaken or assessed by the Minister.
- (16) Pursuant to section 45 (1) (b) of the Act, the Minister may identify that a high priority groundwater dependent ecosystem in Schedule 5 does not have groundwater dependency and delete it from Schedule 5, based on further studies of groundwater ecosystem dependency undertaken by the Minister.
- (17) The distance restrictions specified in subclauses (2), (6), (7) and (10) does not apply to:
 - (a) water supply works (bore) used for monitoring or environmental management purposes, or
 - (b) water supply works (bore) specifically for remedial works and is nominated by an aquifer (interference) access licence for the remedial works.

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Part 10 Limits to the availability of water

Division 1 Long-term average annual extraction limit

40 Limits to the availability of water

This Division is made in accordance with section 20 (2) (a) of the Act.

41 Extraction management units for these water sources

In accordance with clause 16 of this Plan, management of the long-term average annual extraction of water in these water sources will be undertaken in the context of the Bellinger River Catchment and Dalhousie Creek Catchment Extraction Management Units (hereafter *these Units*).

42 Long-term average annual extraction limit

The long-term average annual extraction limit for each of these Units will be the total of:

- (a) the quantity of water specified in conditions attached to or included in entitlements issued under Part 2 of the *Water Act 1912* in the Unit, immediately prior to the commencement of Part 2 of Chapter 3 of the Act for the Unit, plus
- (b) an estimate of annual extraction of water under domestic and stock rights and native title rights in the Unit at the commencement of this Plan, plus
- (c) the sum of share components of access licences granted under clause 35 (2) (a), clause 35 (2) (e) and clause 35 (2) (f) in the Unit.

43 Variation of the long-term average annual extraction limits

- (1) The long-term average annual extraction limit of these Units may be varied by the Minister if surface water dealings under Part 12 of this Plan result in issuing or cancellation of access licences in these Unit.
- (2) The long-term average annual extraction limit for the Bellinger River Catchment Extraction Management Unit may be varied upon the conversion of access licences from unregulated river access licence to an unregulated river high flow access licence.
- (3) The variation in subclause (2) will result in the long-term average annual extraction limit being reduced by the amount of the cancelled share component of the unregulated river access licence and increased by the amount of the share component of the granted unregulated river high flow access licence.

44 Compliance with the long-term average annual extraction limits

- (1) Water extraction in these Units will be monitored each water year to determine if there is any growth in volumes extracted above the extraction limit specified in clause 42, based on comparison of the extraction limit against the average extraction within these Units over that year and the preceding 2 years.

Note. A water year is defined in Schedule 1 as any 12 month period from 1 July.

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- (2) For the purposes of auditing compliance with the long-term average annual extraction limit, water pursuant to an access licence that has been committed as adaptive environmental water where the access licence has been granted under clause 22 (4), shall not be accounted for as extraction under subclause (1).
- (3) If the 3 year average of extraction in these Units exceeds the long-term average annual extraction limit established in clause 42 by 5% or greater, then the available water determination made for unregulated river access licences under clause 48 (1), for the following water year for unregulated river access licences in these water sources shall be reduced by an amount that is assessed as necessary by the Minister to return subsequent total water extraction in these Units to the long-term average annual extraction limit.
- (4) If the 3 year average of extraction in these Units is less than 95% of the long-term average annual extraction limit established in clause 42, the available water determination made under clause 48 (1) for the following water year for unregulated river access licences in these water sources shall be increased to such an extent as to allow total water extraction in these Units to increase to that extraction limit.

Note. The effect of this subclause and clause 48 is that available water determinations for unregulated river access licences can never be greater than 1 ML per unit share, except for the available water determination made for the first year of the Plan.

- (5) Any reduction or increase to the available water determinations made under clause 48 (1) for unregulated river access licences in these water sources as a result of subclause (3) or (4) should be repeated for each of the subsequent two water years.
- (6) If the 3 year average of extraction in these Units exceeds the long-term average annual extraction limit established in clause 42 by 5% or greater, then the available water determination made for unregulated river high flow access licences under clause 49 (1), for the following water year for unregulated river high flow access licences in these water sources shall be reduced by an amount that is assessed as necessary by the Minister to return subsequent total water extraction in these Units to the long-term average annual extraction limit.
- (7) If the 3 year average of extraction in these Units is less than 95% of the long-term average annual extraction limit established in clause 42, the available water determination made under clause 49 (1) for the following water year for unregulated river high flow access licences in these water sources shall be increased to such an extent as to allow total water extraction in these Units to increase to that extraction limit.

Note. The effect of this subclause and clause 49 is that available water determinations for unregulated river high flow access licences can never be greater than 1 ML per unit share, except for the available water determination made for the first year of the Plan.

- (8) Any reduction or increase to the available water determinations made under clause 49 (1) for unregulated river high flow access licences in these water sources as a result of subclause (6) or (7) should be repeated for each of the subsequent two water years.
- (9) If the 3 year average of extraction in these Units exceeds the long-term average annual extraction limit established in clause 42 by 5% or greater, then the available water determination made for aquifer access licences under clause 50 (1), for the following water year for aquifer access licences in these water sources shall be reduced by an amount that is assessed as necessary by the Minister to return subsequent total water extraction in these Units to the long-term average annual extraction limit.

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- (10) If the 3 year average of extraction in these Units is less than 95% of the long-term average annual extraction limit established in clause 42, the available water determination made under clause 50 (1) for the following water year for aquifer access licences in these water sources shall be increased to such an extent as to allow total water extraction in these Units to increase to that extraction limit.

Note. The effect of this subclause and clause 50 is that available water determinations for aquifer access licences can never be greater than 1 ML per unit share, except for the available water determination made for the first year of the Plan.

- (11) Any reduction or increase to the available water determinations made under clause 50 (1) for aquifer access licences in these water sources as a result of subclause (9) or (10) should be repeated for each of the subsequent two water years.

Division 2 Available water determinations

45 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) All available water determinations in these water sources shall be expressed as either:
- (a) a percentage of the share component for all access licences where share components are specified as megalitres per year, or
 - (b) megalitres per unit share for all access licences where share components are specified as a number of unit shares.

46 Available water determinations for domestic and stock access licences

- (1) An available water determination shall be made at the commencement of each water year for domestic and stock access licences in these water sources and shall provide an allocation of 100% of share components, except where the available water determination is made under subclause (2).
- (2) The available water determination made at the commencement of the first year of this Plan, for domestic and stock access licences in these water sources, shall provide an allocation of 200% of share components.

47 Available water determinations for local water utility access licences

- (1) An available water determination shall be made at the commencement of each water year for local water utility access licences in these water sources and shall provide an allocation of 100% of share components, except where the available water determination is made under subclause (2).
- (2) The available water determination made at the commencement of the first year of this Plan, for local water utility access licences in these water sources, shall provide an allocation of 200% of share components.

48 Available water determinations for unregulated river access licences

- (1) An available water determination shall be made at the commencement of each water year for unregulated river access licences in these water sources and shall provide an allocation equal to

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1 megalitre multiplied by the number of unit shares in the share component, or such lower amount as results from clauses 44 (3) or 44 (4), except where the available water determination is made under subclause (2).

- (2) The available water determination made at the commencement of the first year of this Plan, for unregulated river access licences in these water sources, shall provide an allocation equal to 2 megalitres multiplied by the number of unit shares in the share component.

Note. The effect of this clause and clause 44 (4) is that available water determinations for unregulated river access licences can never be greater than 1 ML per unit share, except for the available water determination made for the first year of the Plan.

49 Available water determinations for unregulated river high flow access licences

- (1) An available water determination shall be made at the commencement of each water year for unregulated river high flow access licences in these water sources and shall provide an allocation equal to 1 megalitre multiplied by the number of unit shares in the share component, or such lower amount as results from clauses 44 (6) or 44 (7), except where the available water determination is made under subclause (2).

- (2) The available water determination made at the commencement of the first year of this Plan, for unregulated river high flow access licences in these water sources, shall provide an allocation equal to 2 megalitres multiplied by the number of unit shares in the share component.

Note. The effect of this clause and clause 44 (7) is that available water determinations for unregulated river high flow access licences can never be greater than 1 ML per unit share, except for the available water determination made for the first year of the Plan.

50 Available water determinations for aquifer access licences

- (1) An available water determination shall be made at the commencement of each water year for aquifer access licences in these water sources and shall provide an allocation equal to 1 megalitre multiplied by the number of unit shares in the share component, or such lower amount as results from clauses 44 (9) or 44 (10), except where the available water determination is made under subclause (2).

- (2) The available water determination made at the commencement of the first year of this Plan, for aquifer access licences in these water sources, shall provide an allocation equal to 2 megalitres multiplied by the number of unit shares in the share component.

Note. The effect of this clause and clause 44 (10) is that available water determinations for aquifer access licences can never be greater than 1 ML per unit share, except for the available water determination made for the first year of the Plan.

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Part 11 Rules for managing access licences

Division 1 General

51 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b), 21 (a) and 21 (c) of the Act, having regard to:

- (a) the environmental water rules established in Part 4 of this Plan,
- (b) requirements for water to satisfy basic landholder rights identified in Part 5 of this Plan, and
- (c) requirements for water for extraction under access licences in Part 7 of this Plan.

Division 2 Water allocation account management

52 Water allocation accounts

In accordance with section 85 of the Act, a water allocation account shall be established for each access licence in these water sources.

53 Accrual of water allocations

Water allocations will be accrued into each access licence water allocation account in accordance with the available water determinations made as specified in Division 2 Part 10 of this Plan.

54 Accounting of assigned allocations and return flows

- (1) Water allocations assigned from a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be debited from that water allocation account, and water allocations assigned to a water allocation account under Chapter 3 Part 2 Division 4 of the Act shall be credited to that water allocation account.

Note. Water allocations may be assigned to, or from, these accounts by a water allocation assignment made under section 71T of the Act, where these are allowed under rules specified in Part 12 of this Plan.

- (2) Water allocations may also be recredited to access licence water allocation accounts under section 76 of the Act, in accordance with water return flow rules established under section 75 of the Act.

55 Volume taken under access licences

Note. Section 341 of the Act makes it unlawful to take a volume of water under an access licence that exceeds the volume of water allocation, which is credited to the access licence at the time of water extraction.

- (1) The water allocation taken under an access licence in these water sources shall be the volume of water extracted by the approved water supply works nominated by the access licence, except where subclause (2) applies.

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- (2) If water that, pursuant to an access licence, is committed as adaptive environmental water to be left in a river for environmental purposes, then the water allocation taken under that access licence shall be assumed to be 100% of the available water determination made in Division 2 Part 10 of this Plan.

56 Limits to the volumes that may be taken under access licences

- (1) The maximum volume that may be taken under or assigned from an access licence in these water sources at any time may not exceed the volume in the water allocation account.
- (2) The maximum volume that may be taken under a domestic and stock, local water utility, unregulated river high flow, unregulated river and aquifer access licences in these water sources in any 3 consecutive water years may not exceed a volume equal to:
- (a) the sum of water allocations accrued under the licence from available water determinations in those years,
 - (b) plus any water allocations assigned from another access licence under section 71T of the Act, in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act, in those years, and
 - (d) minus any water allocations assigned to another access licence under section 71T of the Act, in those years.
- (3) Notwithstanding subclause (2), the maximum volume that may be taken under a domestic and stock, local water utility, unregulated river high flow, unregulated river and aquifer access licences in these water sources in the first 3 water years of this Plan may not exceed a volume equal to:
- (a) 3 times the share component for access licences with share components expressed as ML per year or 3 ML multiplied by the number of unit shares for access licence with share components expressed as a number of unit shares,
 - (b) plus any water allocations assigned from another access licence under section 71T of the Act, in those years,
 - (c) plus any water allocations recredited in accordance with section 76 of the Act, in those years, and
 - (d) minus any water allocations assigned to another access licence under section 71T of the Act, in those years.

57 Carrying over of water allocations credits and water allocation account limits

The maximum water allocation that can be carried over in the accounts of domestic and stock, local water utility, unregulated river high flow, unregulated river and aquifer access licences from one water year to the next shall be equal to:

- (a) 100% of the access licence share component for access licences with share components expressed as ML per year, or
 - (b) 1 ML multiplied by the number of unit shares for access licences with share components expressed as a number of unit shares.
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Division 3 Sharing surface water flows on a daily basis

58 Sharing surface water flows on a daily basis

This Division is made in accordance with sections 20 (2) (b) and 21 (a) of the Act.

59 Total daily extraction limits

At the commencement of this Plan, total daily extraction limits (hereafter *TDELS*) have not been established in these water sources.

60 Initial assignment of the TDEL to categories of access licence

No TDELS will be initially assigned to any category of access licence in these water sources.

61 Unassigned TDEL

There are no unassigned TDELS in these water sources.

62 Daily extraction limits for individual access licence holders

At the commencement of this Plan, there are no individual daily extraction limits established for licence holders (hereafter *IDELs*).

63 Granting of unassigned TDEL

There are no unassigned TDELS in these water sources.

64 Very low flow access in these water sources

- (1) During periods of very low flows, holders of local water utility access licences, specified in Schedule 3, may continue to access water until such time as the licence holder undertakes major augmentation to their water supply works.
- (2) During periods of very low flows, holders of access licences other than local water utility access licences, specified in Schedule 3 may continue to access water for the following purposes:
 - (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.
- (3) The maximum daily volume that can be extracted under subclause (2) will:
 - (a) be the minimum required to satisfy the purposes specified in that subclause,
 - (b) be individually assessed and specified on each access licence within 12 months of the commencement of this Plan, and
 - (c) will not exceed 20 kilolitres per day.

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- (4) Once specified under subclause (3) (b) the maximum daily volume that can be extracted under subclause (2) cannot be increased.
- (5) Notwithstanding subclauses (2) and (3), extraction of water by an approved water supply work is only permitted where it complies with the flow conditions of the authorised water supply works or in the absence of such condition, if there is a visible flow in the river in the downstream vicinity of the water supply work.
- (6) The Minister may, under section 45 (1) (b) of the Act, add a licence to Schedule 3 following written request by the holder of an access licence, but only if extraction under the licence is for the purposes established in subclause (2), and the purpose was on the entitlement that was replaced by the access licence.
- (7) The Minister may under section 45 (1) (b) of the Act remove a licence from Schedule 3 if:
 - (a) any access licence dealing results in the water being extracted under that licence from a different location,
 - (b) an alternative water supply is obtained, that satisfies the requirements of subclause (2), or
 - (c) the licence is surrendered or cancelled or the purpose ceases to exist.
- (8) Following an assessment of the continuing requirements for access under this clause the Minister may, under section 45 (1) (b) of the Act amend or delete Schedule 3, if such a review determines that access under this clause is no longer required.

65 Access conditions for access licences which nominated water supply works (bore) approvals in these water sources

- (1) The taking of water under an aquifer access licence which nominates a water supply works (bores) that is at or less than 40 metres from the top of the high bank of a river shall, for the first five years of this Plan, not be subject to the access rules in clause 18 of this Plan applying to unregulated river access licences within the same water source or management zone, except where subclause (2) applies, but will be subject to any other relevant condition on the access licence.
- (2) Notwithstanding subclause (1), where a new water supply works (bore) is required as part of a dealing involving the conversion of an unregulated river access licence to an aquifer access licence under clause 74 of this Plan then the taking of water under the aquifer access licence shall be subject to the same access rules applying to unregulated river access licences within the same water source or management zone.
- (3) The taking of water under an aquifer access licences which nominates a water supply works (bores) that is greater than 40 metres from the top of the high bank of a river shall not be subject to the access rules applying to unregulated river access licences within the same water source or management zone, but will be subject to any other relevant condition on the access licence.
- (4) The taking of water under an aquifer access licences which nominates a water supply works (bores) that is at or less than 40 metres from the top of the high bank of a river shall, after year six of this Plan, be subject to the relevant access rules applying to unregulated river access licences within the same water source or management zone and any other relevant condition on the access licence.

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- (5) The taking of water under a local water utility access licences which nominates a new water supply works (bores) that is at or less than 40 metres from the top of the high bank of a river shall, be subject to the relevant access rules applying to unregulated river access licences within the same water source or management zone and any other relevant condition on the access licence.
- (6) For the purposes of subclauses (4) and (5), an unregulated river access condition that requires a visible flow at the pump site shall be for an aquifer access licence taken to mean a visible flow in the river immediately adjacent to the water supply work (bore).
- (7) The taking of water under a local water utility or domestic and stock access licences which, at the commencement of this Plan, nominates a water supply works (bores), that is less than 40 metres from the top of the high bank of a river shall not be subject to the access rules applying to local water utility or domestic and stock access licences access licences within the same management zone or water source, but will be subject to any other relevant condition on the access licence, except where clause (5) applies.

66 Infrastructure failure in these water sources

In the event of infrastructure failure in these water sources, the Minister may elect to:

- (a) continue to announce the current flow class,
- (b) announce another flow class based on climatic conditions and any other flow gauging information, and
- (c) restrict access to water to the lowest flow class or in the absence of flow classes to visible flow.

Note. If satisfied that it is necessary to do so in the public interest, the Minister may direct the holders of an access licence to cease using a water supply work in accordance with section 323 of the Act.

Division 4 Management of local impacts

67 Management of local impacts

- (1) This Division is made in accordance with section 21 (a) of the Act.
- (2) The Minister may declare a defined area to be known as a local impact area in order to:
 - (a) protect water levels within a water source,
 - (b) protect water quality within a water source,
 - (c) protect high priority groundwater dependent ecosystems in Schedule 5 through the protection of water quality and/or water levels, or
 - (d) protect aquifer integrity .
- (3) The declaration in subclause (2) will contain the rules that are to apply in the local impact area and those rules will apply pursuant to a mandatory condition on each access licence requiring compliance with rules.

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- (4) The Minister is to advise in writing each licence holder who becomes subject to local impact rules.

Note. The Minister may also, if satisfied that it is necessary to do so in the public interest, may make an order under section 323 of the Act, directing that for a specified period, the taking of water from a specified water source is totally prohibited.

68 Water level management

- (1) Where the Minister declares a local impact area under clause 67 (2) (a), 67 (2) (c) or 67 (2) (d) extraction will be restricted to such an extent and for such time as is required to restore groundwater levels to a sustainable level and/or to protect or restore groundwater dependent ecosystems.
- (2) The Minister may nominate specific water levels to define the terms referred to in subclauses (1), to ensure extraction does not cause an ongoing decline in groundwater levels.
- (3) In the case of subclause (1), the local impact rules may also be:
- (a) expressed as restrictions on yearly, quarterly, or weekly extraction in the affected areas, and
 - (b) subject to review based on assessment of data from monitoring bores within the local impact area.
- (4) If water levels recover, extraction restrictions may be eased to such an extent as to allow recovered water levels to be maintained and fluctuate within the normal bounds of climate variability.

Note. This clause recognises that in some locations, at certain periods of high groundwater demand, critical water level declines may occur, and that additional extraction limitations may be required. The Department of Water and Energy will identify monitoring bores, and determine the method for specifying an affected area.

69 Water quality management

- (1) The beneficial uses of these water sources are specified in Schedule 6.

Note. There are localised areas within these groundwater sources where the beneficial use is of a lower class.

Note. It is not recommended that water direct from the groundwater be consumed by humans without prior treatment. Land use activities may have resulted in pollution of the groundwater in some areas.

- (2) Water quality decline will be deemed unacceptable if extraction causes, or is likely to cause, water quality to decline to a lower beneficial use class, as prescribed within the framework described in the NH&MRC/ARMCANZ *Australian Drinking Water Guidelines* (1996), and the ANZECC/ARMCANZ *Guidelines for Fresh and Marine Water Quality* (2000).
- (3) Before making a local impact area declaration made under clause 67 (2) (b) or 67 (2) (c) (in respect to water quality on groundwater dependent ecosystems), the Minister shall have regard to the results of:
- (a) a site inspection, and
 - (b) water analysis from bores,
- within the proposed local impact area.
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- (4) If water quality decline is resulting from extraction, extraction from all water supply works (bores) nominated by an access licence within a local impact area declared under clause 67 (2) (b) will be restricted to such an extent and for such time as required to halt that decline, or restore the beneficial use of the groundwater.
- (5) In the case of subclause (4), the local impact rules may be:
 - (a) expressed as restrictions on yearly, quarterly, or weekly extraction in the affected areas, and
 - (b) subject to review based on assessment of data from monitoring bores within the local impact area.
- (6) An existing water supply work (bore) within 100 metres of a contamination source identified in Schedule 4, will be able to continue extraction of groundwater at levels equivalent to the access licence share component at the commencement of this Plan nominating that work, subject to any restrictions arising from subclause (4).

70 Infrastructure failure in local impact areas

- (1) The operational rules relating to a local impact area may rely on water levels at specified monitoring bores.
- (2) In the event of a monitoring bore failure the Minister may:
 - (a) continue with the current access rules until the monitoring bore is reinstated,
 - (b) adjust the current access rules based on climatic conditions and monitoring bore information, until the monitoring bore is reinstated, and
 - (c) rely on another monitoring bore in the area to provide information.

Part 12 Access licence dealing rules

71 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted on 1 July 2004 (as amended) under section 71Z of the Act.
- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71Z of the Act and the rules in this Part.
- (3) To the extent that the water allocation of an access licence which is subject to an adaptive environmental water condition is not required to meet the requirement of the condition it may be the subject of an assignment dealing in accordance with the Dealings Rules in Part 12 of this Plan.
- (4) Notwithstanding subclause (3) an access licence with an adaptive environmental water condition may be the subject of any other dealing permitted by the Dealing Rules in this Plan, provided the benefit to the environment provided for in the adaptive environmental condition is not diminished.

Note. There are a number of mechanisms within the Act, called access licence dealings, to change either the holder of all or part of an access licence, or the location within a water source at which all or part of the share and extraction components of access licences can be exercised. These dealings are governed by the principles in section 5 of the Act, the Minister's access licence dealing principles, and the rules in this Part.

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71Z of the Act provides for the Minister's access licence dealing principles to prevail.

Note. An unregulated river (Aboriginal commercial) access licence will not be fully commercial. Allocations under these licences will be able to be traded to non-Aboriginal people however the licence 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 fully commercial licences.

Note. In line with interagency agreement the Department proposes to amend the access licence sub category 'Aboriginal Commercial' to 'Aboriginal Community Development' in the *Water Management Act 2000 Regulation*.

72 Rules relating to constraints within these water sources

- (1) This clause applies to any relevant dealings under sections 71Q, 71S and 71W, and with respect to water allocation assignments under section 71T of the Act, within these water sources.
- (2) Dealings are prohibited under this clause if:
 - (a) the dealing would result in the total extraction under access licences through nominated water supply works (bores) in the area, plus basic landholder rights extraction, causing any adverse local impact in accordance with Part 11, Division 4 of this Plan,
 - (b) the dealing involves an assignment of access rights or an allocation assignment from an aquifer access licence that nominates a water supply works (bores) outside 40 metres

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- from the top of the bank of a river to a water supply works (bores) within 40 metres from the top of the bank of a river,
- (c) the dealing involves an assignment of access rights or an allocation assignment from an access licence in:
- (i) Thora - North Arm Bellinger River Water Source, if it is from the Lower Thora – North Arm Bellinger River Management Zone to the Upper Thora – North Arm Bellinger River Management Zone,
 - (ii) the Bellinger River Water Source, the Coastal Bellinger Water Source, the Coastal Kalang Water Source or Hydes Creek Water Source Water Source, if it is from the non tidal management zone to the tidal pool management zone, where
 - (1) an assessment of the allowable annual limit that can be extracted within the respective tidal pool management zone has not been undertaken and that limit has not been specified in the Implementation Program for this Plan,
 - (2) it causes total access licence share components in the tidal pool management zone to exceed the allowable annual limit that can be extracted within the respective management zone as specified in the Implementation Program for this Plan,
 - (iii) the Kalang River Water Source, if it is from the Tidal Pool Management Zone to the Non Tidal Management Zone,
 - (iv) the Hydes Creek Water Source, if it is from the Tidal Pool Management Zone to the Non Tidal Management Zone and it causes total access licence share components in the non tidal management zone to exceed the total access licence share components in that management zone at the commencement of this Plan, and
 - (v) the Bellinger River Water Source, if it is from the Tidal Pool Management Zone to the Non Tidal Management Zone and it causes the total access licence share components in the non tidal management zone to exceed the total access licence share components in that management zone at the commencement of this Plan plus 54 ML,
- (d) the dealing involves an assignment of access rights or an allocation assignment from an unregulated river high flow access licence to an access licence of another category,
- (e) the dealing involves an access licence, that currently nominates works in:
- (i) the Lower Thora – North Arm Bellinger River Management Zone of the Thora-North Arm Bellinger River Water Source nominating works in the Upper Thora – North Arm Bellinger River Management Zone,
 - (ii) a non tidal management zone of the Bellinger River Water Source, the Coastal Bellinger Water Source, the Coastal Kalang Water Source or Hydes Creek Water Source Water Source nominating works in a tidal pool management zone, if:
 - (1) an assessment of the allowable annual limit that can be extracted within the respective tidal pool management zone has not been undertaken and that limit has not been specified in the Implementation Program for this Plan,

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- (2) it causes total access licence share components in the tidal pool management zone to exceed the allowable annual limit that can be extracted within the respective management zone as specified in the Implementation Program for this Plan,
 - (iii) the Tidal Pool Management Zone of the Kalang River Water Source nominating works in the Non Tidal Management Zone,
 - (iv) the Tidal Pool Management Zone of the Hydes Creek Water Source nominating works in the Non Tidal Management Zone and it causes total access licence share components in the non tidal management zone to exceed total access licence share components in that management zone at the commencement of this Plan, and
 - (v) the Tidal Pool Management Zone of the Bellinger River Water Source nominating works in the Non Tidal Management Zone and it causes the total access licence share components in the non tidal management zone to exceed the total access licence share components in that management zone at the commencement of this Plan plus 54 ML, and
- (f) the access licence dealing involves consent to the nomination of a water supply work (bore) prohibited under clause 39 of this Plan.

73 Rules for change of water source

- (1) This clause relates to dealings under section 71R and 71W of the Act.

Note. Section 71R dealings are the mechanism by which access licences can move from one water source to another. Once the change in water source has been affected, if permitted, the new license will have to nominate specified works (by a dealing under section 71W of the Act) in the receiving water source before extraction can commence.

- (2) Dealings under section 71R and 71W of the Act that change the water source to which an access licence applies are prohibited in these water sources if:
- (a) the dealing involves a change of water source from one extraction management unit to another extraction management unit,
 - (b) the dealing is into Dalhousie Creek Water Source, Never Never Creek Water Source, Rosewood Creek Water Source or Thora - North Arm Bellinger River Water Source,
 - (c) the dealing is into Boggy Creek Water Source and it causes the total access licence share components to exceed the total access licence share components in that water source at the commencement of this Plan, plus 50 ML,
 - (d) the dealing is into Spicketts Creek Water Source from a water source other than the Non Tidal Management Zone of the Kalang River Water Source,
 - (e) the dealing is into the Non Tidal Management Zone of the Bellinger River Water Source and it causes the total access licence share components in the non tidal management zone to exceed the total access licence share components in that management zone at the commencement of this Plan plus 54 ML,
 - (f) the dealing is into the Non Tidal Management Zone of the Coastal Bellinger Water Source and it causes the total access licence share components in the non tidal

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- management zone to exceed the total access licence share components in that management zone at the commencement of this Plan plus 14 ML,
- (g) the dealing is into the Non Tidal Management Zone of the Coastal Kalang Water Source and it causes the total access licence share components in the non tidal management zone to exceed the total access licence share components in that management zone at the commencement of this Plan plus 88 ML,
 - (h) the dealing is into the non tidal management zone of the Hydes Creek Water Source and it causes total access licence share components in the non tidal management zone to exceed total access licence share components in that management zone at the commencement of this Plan,
 - (i) the dealing is into the Non Tidal Management Zone of the Kalang River Water Source from another water source other than Spicketts Creek Water Source, and
 - (j) the dealing is into the tidal pool management zone of the Bellinger River Water Source, the Coastal Bellinger Water Source, the Coastal Kalang Water Source, Hydes Creek Water Source or Kalang River Water Source where:
 - (i) an assessment of the allowable annual limit that can be extracted within the respective tidal pool management zone has not been undertaken and that limit has not been specified in the Implementation Program for this Plan, or
 - (ii) it causes total share components of access licences in the tidal pool management zone to exceed the allowable annual limit that can be extracted within the respective management zone as specified in the Implementation Program for this Plan.
- (3) Dealings under section 71R and 71W of the Act that change the water source to which an access licence applies are prohibited in these water sources if the dealing involves an unregulated river high flow access licence.
 - (4) Dealings under section 71R and 71W of the Act that change the water source to which an access licence applies are prohibited in these water sources if the dealing would result in the total extraction under access licences through nominated water supply works (bores) in the area, plus basic landholder rights extraction, causing any adverse local impact in accordance with Part 11, Division 4 of this Plan.
 - (5) Unless the application is for a replacement water supply work (bore) that is part of a bore network for a local water utility or town water supply or a new water supply works (bore) required as part of a dealing involving the conversion of an unregulated river access licence to an aquifer access licence under section 71O of the Act and clause 74 of this Plan, consent to a nominated work under section 71W, is not to be granted in these groundwater sources, if it would result in a water supply work (bore) being authorised to extract water within 40 metres of the top of the high bank of a river.
 - (6) The share component on an access licence issued under this clause is to be equal to the cancelled access licence share component.
 - (7) The extraction component of the cancelled access licence is not to be carried over to the new access licence.

74 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71O of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category are permitted only if the conversion is from:
 - (a) an unregulated river access licence to an aquifer access licence, or
 - (b) an unregulated river access licence to an unregulated river high flow access licence in the Never Never and Hydes Creek Water Sources.
- (3) For any conversion of an access licence under subclauses (2) (a) and 2 (b) the access licence being converted shall be cancelled and a new licence issued.
- (4) The share component on an access licence issued under subclause 2 (a) is to be equal to the cancelled access licence share component.
- (5) The volume of share component on an access licence issued under subclause (2) (b) is to be equal to 2.5 times the cancelled access licence share component.
- (6) The total amount of all access licence share component that can be converted to unregulated high flow access licences under subclause (2) (b) shall be limited to:
 - (a) 250.8 unit shares in the Hydes Creek Water Source, and
 - (b) 723.2 unit shares in the Never Never Water Source.

Note. Approval for conversion of an unregulated river access licence to an unregulated river high flow access licence will be subject to assessment of the application in regard to the level of impact of the proposed conversion. This should include consideration of the potential impact on high flow (eg flows greater than the 50th percentile flow) values, and any potential impact on the water source as a whole.

75 Rules for interstate access licence transfer

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

76 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71T of the Act.
- (2) Dealings under section 71T that result in water allocation assignments to or from an access licence in one of these water sources to or from an access licence in another of these water sources are prohibited in these water sources if the dealing would result in the total extraction under access licences through nominated water supply works (bores) in the area, plus basic landholder rights extraction, causing any adverse local impact in accordance with Part 11, Division 4 of this Plan.
- (3) Dealings under section 71T of the Act that result in water allocation assignments to or from an access licence in one of these water sources to or from an access licence in another of these water sources are prohibited if:

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- (a) the dealing involves a change of water source from one extraction management unit to another extraction management unit,
- (b) the dealing is into Dalhousie Creek Water Source, Never Never Creek Water Source, Rosewood Creek Water Source or Thora - North Arm Bellinger River Water Source,
- (c) the dealing is into Boggy Creek Water Source and it causes the total access licence share components to exceed the total access licence share components in that water source at the commencement of this Plan, plus 50 ML,
- (d) the dealing is into Spicketts Creek Water Source from a water source other than the Kalang River Water Source,
- (e) the dealing is into the Non Tidal Management Zone of the Bellinger River Water Source and it causes the total access licence share components in the non tidal management zone to exceed the total access licence share components in that management zone at the commencement of this Plan plus 54 ML,
- (f) the dealing is into the Non Tidal Management Zone of the Coastal Bellinger Water Source and it causes the total access licence share components in the non tidal management zone to exceed the total access licence share components in that management zone at the commencement of this Plan plus 14 ML,
- (g) the dealing is into the Non Tidal Management Zone of the Coastal Kalang Water Source and it causes the total access licence share components in the non tidal management zone to exceed the total access licence share components in that management zone at the commencement of this Plan plus 88 ML,
- (h) the dealing is into the non tidal management zone of the Hydes Creek Water Source and it causes total access licence share components in the non tidal management zone to exceed total access licence share components in that management zone at the commencement of this Plan,
- (i) the dealing is into the Non Tidal Management Zone of the Kalang River Water Source from another water source other than Spicketts Creek Water Source,
- (j) the dealing is into the tidal pool management zone of the Bellinger River Water Source, the Coastal Bellinger Water Source, the Coastal Kalang Water Source, Hydes Creek Water Source or Kalang River Water Source where:
 - (i) an assessment of the allowable annual limit that can be extracted within the respective tidal pool management zone has not been undertaken and that limit has not been specified in the Implementation Program for this Plan, or
 - (ii) it causes total share components of access licences in the tidal pool management zone to exceed the allowable annual limit that can be extracted within the respective management zone as specified in the Implementation Program for this Plan, and
- (k) the dealing involves an unregulated river high flow access licence.

77 Rules for interstate assignment of water allocations

- (1) This clause relates to dealings under section 71V of the Act.
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- (2) Dealings that result in interstate assignment of water allocations to or from these water sources are prohibited.

Part 13 Mandatory conditions

78 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.
- (2) All access licences in these water sources shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) the requirement that all extraction under access licences will be subject to the available water determinations made pursuant to section 59 of the Act,
 - (b) the requirement that all extraction under access licences will be subject to the account management rules established in Part 11 this Plan,
 - (c) the requirement that all extraction under aquifer access licences will be subject to any local impact rules established in Division 4 of Part 11 of this Plan,
 - (d) the taking of any water in a water allocation account for an access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water remaining in the account,
 - (e) the requirement that water may only be taken by water supply works nominated on the access licence, consistent with the conditions of the works approval, and
 - (f) any other conditions required to implement the provisions of this Plan.
- (3) All access licences in these water sources, excluding unregulated river high flow access licences and unregulated river (Aboriginal commercial) access licences, shall have a mandatory condition which specifies a cease to pump which is the higher of:
 - (a) the upper limit of the Very Low Flow Class established in clause 18 for the respective water source or management zone, or
 - (b) the cease to pump threshold specified on the entitlement issued under Part 2 of the *Water Act 1912* that is being replaced by an access licence under the Act.
- (4) All domestic and stock access licences in these water sources shall have mandatory conditions to give effect to the following:
 - (a) water may only be taken for the purposes of domestic consumption or stock watering as defined in section 52 of the Act,
 - (b) where a flow class has been determined by the Minister water may only be taken at a rate not exceeding that specified for the flow class and in the access licence extraction component, unless otherwise authorised by an approved group,
 - (c) where a flow class has not been determined by the Minister water may only be taken in accordance with the related cease to pump flow rate,
 - (d) notwithstanding subclauses (b) and (c), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows, and

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- (e) the conditions in subclauses (b) (c) and (d) are not to be imposed if the extraction component of the access licence specifies that water may only be taken from a runoff harvesting dam.
- (5) All local water utility access licences in these water sources shall have mandatory conditions to give effect to the following:
- (a) water may only be taken for the purposes of supplying water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act,
 - (b) where a flow class has been determined by the Minister water may only be taken at a rate not exceeding that specified for the flow class on the access licence extraction component, and
 - (c) notwithstanding subclause (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.
- (6) All unregulated river access licences in these water sources shall have mandatory conditions to give effect to the following:
- (a) where a flow class has been determined by the Minister water may only be taken at a rate not exceeding that specified for the flow class and in the access licence extraction component, unless otherwise authorised by an approved group,
 - (b) where a flow class has not been determined by the Minister water may only be taken in accordance with the related cease to pump flow rate, and
 - (c) notwithstanding subclauses (a) and (b), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.
- (7) All unregulated river high flow access licences and unregulated river (Aboriginal commercial) access licence in these water sources shall have mandatory conditions to give effect to the following:
- (a) a cease to pump flow rate which is the higher of:
 - (i) the lower limit of the B Class established in clause 18 for the respective water source or management zone, or
 - (ii) the cease to pump threshold specified on the entitlement issued under Part 2 of the Water Act 1912 that is being replaced by an access licence under the Act,
 - (b) where a flow class has been determined by the Minister water may only be taken at a rate not exceeding that specified for the flow class and in the access licence extraction component, unless otherwise authorised by an approved group,
 - (c) where a flow class has not been determined by the Minister water may only be taken in accordance with the related cease to pump flow rate, and
 - (d) notwithstanding subclauses (b) and (c), water may be taken without any restrictions in rate from an in-river dam while the dam is passing all inflows.

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- (8) All access licences in these water sources that nominate a runoff harvesting work shall have a mandatory condition imposed on them specifying that water may be taken without restriction in rate, but only from the specified work.
- (9) Access licences listed in Schedule 3 shall have mandatory conditions to give effect to clause 64.
- (10) All (Aboriginal cultural) access licences shall have mandatory conditions that only allow the taking of water by Aboriginal persons or communities for personal, domestic and communal purposes, including the purpose of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching hunting, fishing and gathering and for recreational, cultural and ceremonial purposes.
- (11) All unregulated river (Aboriginal commercial) access licences shall have mandatory conditions that only allow the taking of water by Aboriginal persons or communities for commercial purposes.
- (12) All aquifer access licences shall have mandatory conditions to give effect to a local impact area declaration under clause 67 of this Plan.
- (13) All aquifer access licences shall have mandatory conditions to give effect to clause 65 of this Plan.

79 Mandatory conditions on water supply works approvals

- (1) All approvals for water supply works, other than water supply works (bore), in these water sources shall have mandatory conditions to give effect to the following:
 - (a) when directed by the Minister, flow measurement devices shall be installed and maintained on all works used for extraction of water under a surface water access licence and shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
 - (b) water extraction and property water management infrastructure and cropping details shall be provided to the Minister on request,
 - (c) the taking of water may only occur in accordance with the conditions applying to the access licence for whose water allocation account the taking of water will be debited,
 - (d) it is the responsibility of the work approval holder to ascertain the flow class at any time before commencing to take water under an access licence,
 - (e) for all water sources, notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted only where it complies with the flow conditions of the authorised water supply works or in the absence of such condition, if there is a visible flow in the river in the downstream vicinity of the water supply work or where water is being taken from a pool, a visible inflow and outflow to and from that pool,
 - (f) for the Bellinger River Water Source, the Hydes Creek Water Source and the Never Never Creek Water Source, extraction of water from a river by an approved water supply work is permitted only where it complies with clauses 21 (3) (c), 21 (3) (d), and 21 (3) (e) of this Plan respectively,

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- (g) extraction under an access licence through an approved work is only authorised with respect to the work nominated by the access licence,
- (h) approvals for in-river dams must include a condition requiring the passing of such flows as the Minister determines to be appropriate to achieve the objectives of this Plan, and
- (i) any other conditions required to implement the provisions of this Plan.

80 Mandatory conditions on water supply works (bore) approvals

Note. In accordance with the Act, actual extraction of groundwater can only be undertaken through an approved water supply work (bore). Standards and conditions relating to the construction, maintenance, operation and decommissioning of these works are particularly important. If not properly adhered to, the works themselves can be a conduit for contamination of the groundwater source.

- (1) All approvals for water supply works (bores), in these water sources shall have mandatory conditions to give effect to the following:
 - (a) the water supply work (bore) is only to be constructed by a driller licensed under Part 5 of the *Water Act 1912* or the *Water Management Act*,
 - (b) the water supply work (bore) must comply with drilling standards as specified by the Minister,
 - (c) construction of a water supply work (bore) must prevent contamination between aquifers through proper bore construction,
 - (d) a water supply work (bore) approval holder must ensure decommissioning procedures comply with applicable standards as specified by the Minister,
 - (e) a new or replacement water supply work (bore) to access water for basic rights will be required, as a condition of approval, to be constructed to sufficient depth to ensure that access to the resource is not unacceptably impacted by other authorised extractions,
 - (f) the water supply work (bore) approval holder is, within 2 months of completion, or after the issue of the approval if the water supply work (bore) is existing, to submit to the Department the following:
 - (i) details of the water supply work (bore) on the prescribed form,
 - (ii) the location of the authorised water supply works (bore) on the lot and deposited plan, GPS references, and the location of the water supply work (bore) in relation to property boundaries, and
 - (iii) details of any water analysis and/or pumping tests as required by the Minister,
 - (g) if during the construction of the water supply work (bore), saline or contaminated water is encountered above the production aquifer, such water is to be sealed off by:
 - (i) inserting the appropriate length of casing to a depth sufficient to exclude the saline or contaminated water from the work, and
 - (ii) placing an impermeable seal between the casing and the wall of the bore hole from the bottom of the casing to ground level, as specified by the Minister,

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- (h) if a water supply work (bore) is abandoned, the water supply work (bore) approval holder is to:
 - (i) notify the Minister that the work has been abandoned, and
 - (ii) seal off the aquifer by backfilling the work to ground level after withdrawing the casing (lining), as specified by the Minister,
 - (i) when directed by the Minister, an extraction measurement device shall be installed and maintained on each water supply work (bore) used for extraction of water under access licence, and shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
 - (j) a water supply work (bore) must comply with the relevant local impact rules in Division 4 of Part 11 of this Plan.
 - (k) extraction under an access licence through an approved water supply work (bore) is only authorised with respect to the work nominated by the access licence,
 - (l) a water supply work (bore) approval holder must supply to the Minister on request, and to the required standards, a report pertaining to the quality of the water obtained from the water supply work (bore),
 - (m) a water supply work (bore) must be constructed within 3 years of the approval being granted, and
 - (n) any other conditions required to implement the provisions of this Plan.
- (2) All approved water supply works (bores) in these water sources shall have a mandatory condition that only allows the taking of water from these water sources which is the more restrictive of:
- (i) the conditions specified on the entitlement issued under the Water Act 1912 that is being replaced by an access licence under the Act taken to be a mandatory condition on the replacement water supply work approval, or
 - (ii) an extraction limiting condition arising from this Plan.

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Part 14 Monitoring and reporting

81 Monitoring and reporting of performance indicators

The monitoring and reporting of the performance indicators specified in clause 13 shall be undertaken by the Minister.

Note. Review and Audit of this Plan

In accordance with section 43A of the Act, the Water and Energy Commission must undertake a review of this Plan prior to any decision to extend its term or to make a new plan. The review must consider the extent to which this Plan's water sharing provisions have contributed to achieving or not achieving the relevant Water and Energy management standards and targets in the catchment management area (as referred to in section 5 of *the Catchment Management Authorities Act 2003*).

When undertaking this review the Water and Energy Commission is required to call for public submissions. The Commission will take into consideration any submission received as well as any other relevant State-wide or regional government policies or agreements that apply to the catchment management area.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with the water management committee, where one exists.

Note. Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51(5) of the Act, the Implementation Program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program are included in the annual report for the Department.

Part 15 Amendment of this Plan

82 Amendment of this Plan

This part is made in accordance with section 45 (1) (b) of the Act.

83 Amendments due to floodplain harvesting

This Plan may be amended so as to provide for the floodplain harvesting of water, subject to the amendments not affecting the outcomes of the long-term average annual extraction limit specified within this Plan.

Note. This means that this Plan can be changed to issue and manage floodplain harvesting licences provided that the long-term average annual extraction limit (LTAAEL) does not increase or decrease. Floodplain harvesting in coastal systems is limited compared to inland systems. By not amending the LTAAEL with the granting of these licences, coastal systems are being consistent with inland systems where growth is managed within the existing LTAAEL.

84 Amendments for Coastal Sands Water Source

The Minister may, under section 45 (1) (b) of the Act amend this Plan, where required, to include provisions and rules for the waters in the coastal sands that are within and outside the area of this Plan.

Note. Coastal sands are defined as the sand plains and sand dunes associated with beach complexes.

85 Amendments for alluvial aquifers downstream of the tidal limit

The Minister may, under section 45 (1) (b) of the Act amend this Plan, where required, to include provisions and rules for the alluvial aquifer that is downstream of the tidal limit and within or outside of the area of this Plan.

86 Amendments for stormwater harvesting

The Minister may, under section 45 (1) (b) of the Act, amend:

- (a) Part 3,
- (b) Part 4,
- (c) Part 8
- (d) Part 9,
- (e) Part 10,
- (e) Part 11, Division 2 and 3,
- (f) Part 12, and
- (h) Part 13,

to include rules for any new category of access licence established under the Act for the purpose of stormwater harvesting.

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87 Other amendment of this Plan

This Plan may also be amended in accordance with the following clauses:

- (a) clause 5 (4) in respect to amending an existing, or establishing a new or additional management zones,
- (b) clauses 17 (2), 17 (3) and 17 (4) in respect to additional or amendment to flow reference points,
- (c) clause 18 (2) in respect to the establishment of new or additional flow class or classes,
- (d) clause 21 (4) in respect to the identification, establishment and maintenance of planned environmental water,
- (e) clause 39 (5) in respect to the distance restrictions to minimise interference between extraction,
- (e) clause 39 (9) in respect to contamination sources,
- (f) clauses 39 (11), 39 (14), 39 (15) and 39 (16) in respect to high priority groundwater dependent ecosystems, and
- (g) clauses 64 (6), 64 (7) and 64 (8) in respect to access to very low flows by access licences in Schedule 3.

Schedule 1 Dictionary

The following definitions apply to this Plan in addition to the definitions set out in the Act:

account water is the balance in an access licence water allocation at a particular time.

extraction limit is a limit on the amount of water that may be extracted from an extraction management unit.

extraction management unit is a group of water sources for the purpose of managing annual average extraction.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or few properties. It does not include publicly owned dams or weirs.

flow classes are categorised by the size and duration of flow levels in unregulated rivers, for example:

- (a) Very Low Flows may be a class on their own,
- (b) low flows may be categorised as A Class flows,
- (c) moderate flows may be categorised as B Class flows, and
- (d) high flows may be categorised as C Class flows.

flow gauging station is a device that is used to measure the height of a river, from which the flow in the river can be calculated.

in-river dam is a dam on a 3rd, 4th or higher order river. 3rd, 4th or higher or higher order rivers are as defined in the order made under section 5 of the Water Act 1912 in relation to the definition of a “river” gazetted 23rd March 2001.

karst environment means an area of land, including subterranean land, that has developed in soluble rock through the processes of solution, abrasion or collapse, together with its associated bedrock, soil, water, gases and biodiversity.

management zone is an area within the surface water source in which daily extraction limits may be defined or where dealing restrictions are approved. Management zones may be designated where the surface water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area. They may also be designated where local dealing restrictions are in place.

runoff harvesting dam is a farm dam on a hillside or 1st or 2nd order stream which collects and stores rainfall runoff. 1st and 2nd order streams are as defined in the order made under section 5 of the Water Act 1912 in relation to the definition of a river gazetted 23rd March 2001.

stream order is defined by the Strahler stream ordering method.

tidal pool is the area of water between the upper mangrove limit and lower tidal limits, with the mangrove limit being that 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).

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 is the continuous downstream movement of water that is perceptible to the eye.

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

water year is a 12 month period from 1 July to 30 June.

Note. The Strahler system is explained as follows:

- Starting at the top of a catchment, any watercourse that has no other watercourses flowing into it is classed as a 1st order watercourse,

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- Where two 1st order watercourses join, the watercourse becomes a 2nd order watercourse,
- If a 2nd order watercourse is joined by a 1st order watercourse - it remains a 2nd order watercourse,
- When two or more 2nd order watercourses join they form a 3rd order watercourse,
- A 3rd order watercourse does not become a 4th order watercourse until it is joined by another 3rd order watercourse and so on.

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Schedule 2 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL – contributes to target in full

HIGH - while not fully contributing to target is considered a good level of contribution

PARTIAL - goes some way to contributing to the target

LOW - only small degree of contribution to the target

Relevant Target	Level of contribution	Comments
Target 1c Long-term average annual extraction limits which are ecologically sustainable, and which minimise downstream impacts, established in all coastal water sources.	FULL	An overall long-term average annual extraction limit has been set for each extraction management unit. The unlicensed extraction downstream of the current limit for licensing under the Water Act 1912 will be incorporated into that long-term average annual extraction limit once volumetric conversion occurs.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon.	FULL	Rules for Available Water Determination (AWD) adjustment are set out in Part 10 of this Plan and ensure that the long-term average annual extraction limit is not exceeded. This Plan is a Minister's plan and therefore no management committee involvement required.
Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes.	HIGH	Cease to pump rules protect and restore aquatic habitats. These rules were based on risk to instream values. These values were based on: naturalness; diversity; rarity including threatened species, populations and communities; and special features. Trading rules were designed to reduce stress in water sources with high instream values.
Target 4a Wherever the frequency of "end of system" daily flows would be less than 60% of the pre-development level without environmental water rules or extraction limits, the flows increased to 60% of pre-development levels or increased by at least 10% of the pre-development frequency.	PARTIAL	Access rules and trading rules will contribute to restoration of flow in proportion to the risk to instream values. High risk water sources will have a higher proportion and low risk a lower proportion.
Target 4b Frequency of "end of system" daily very low flows (as defined by local field investigation) protected or restored to pre-development levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the pre-development 95th percentile.	HIGH	Cease to pump level at end of system established for all water sources to protect daily very low flows, excluding Dalhousie Creek Water Source and Spicketts Creek Water Source.
Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components.	FULL	The Plan specifies access rights in terms of share and extraction components.
Target 6b For surface water sources, a pathway for reducing the share components to 200 percent of the long term average annual extraction limit to be established not later than the end of the term of the SWMOP.	FULL	Long-term average annual extraction limit based on existing entitlement plus exemptions. No pathway required
Target 7 Mechanisms in place to enable Aboriginal communities to gain an increased share of the benefits of the water economy.	HIGH	The Plan provides for the granting of access licences for Aboriginal commercial purposes available in low hydrological stressed, and medium to low instream value, water sources.

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		The Plan also provides market opportunities for Aboriginal Water Trust.
Target 8 Daily extraction components specified and tradeable, subject to metering, reporting and compliance, for at least 50 percent of unregulated river access licences and for 80 percent of stressed unregulated rivers.	PARTIAL	Flow classes established but no daily extraction limits set.
Target 10 Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable base flows to the river to be maintained or improved.	HIGH	Interaction between rivers and groundwater considered in developing the Plan. Rules for works in close proximity to river in adjacent Groundwater Plans consistent with the Plan.
Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use.	FULL	The Plan recognises domestic and stock rights and provides access rules to protect the impact. Cease to pump access rules will protect basic landholder rights users from the impact of extraction by access licences.
Target 13 The knowledge sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed	PARTIAL	Liaison with regional Aboriginal networks and work undertaken with Aboriginal staff to identify appropriate communication mechanisms and approaches for local Aboriginal Land Councils to provide input to the planning process. Given limited information on specific cultural values Plan adopts an approach to protect cultural values through general environmental protection provided by rules. Aboriginal dependence on water recognised through Basic Landholder Rights and specific access licences for cultural and commercial purposes.
Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them.	LOW	Where possible, water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people were identified and the risks from water extraction assessed in the preparation of the Plan. Further comment from Aboriginal communities is being sought during the exhibition of the draft plan. Access and dealing rules established to protect and enhance.
Target 16a All share components of access licences tradeable.	HIGH	Part 12 of the Plan provides for trading of access licence share components.
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water.	FULL	Part 12 of the Plan establishes the protocols for trading between water sources. An exchange rate of 1:1 for trading between water sources within each extraction management unit has been adopted, and a conversion factor of 2.5 :1 for high flow access in the Hydes Creek and Never Never Water Sources.
Target 16e Any unassigned access rights identified and clear mechanisms established for their future assignment.	FULL	The Plan has identified that there is no unassigned access rights. The Plan identified which access licence categories can be granted and the rules for variation to the LTAEL as a result of granting those access licences.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit.	HIGH	The Plan establishes management zones in Part 1 of the Plan and establishes flow rules for specific management zones in clause 18 of the Plan, and the trading rules within and between zones in Part 12 of the Plan.
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries.	PARTIAL	The Plan contain a water quality objective for the contribution to the maintenance of water quality. There are no recommendations from any Healthy Rivers Commission Inquiries over the area of the Plan.

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Schedule 3 Licences under the Water Act 1912 or Water Management Act 2000 with access to very low flows

Schedule 3 currently lists Water Act licenses from which Water Management Act licences will be derived upon commencement of the WSP.

Note: At the commencement of this Plan there are 5 licences included in this schedule.

Water Act Licences (Non Local Water Utilities)

30SL040955

30SL065242

30SL065813

30SL066237

30SL039469

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Schedule 4 Contamination sources in the Bellinger River Area Unregulated and Alluvial Water Sources

Contamination sources in the Bellinger River Area Unregulated and Alluvial Water Sources include:

- (a) on site sewage disposal systems or septic tanks,
- (b) any sites where contamination has been assessed as presenting a significant risk of harm under *Contaminated Land Management Act 1997*,
- (c) any sites with an historical use listed in Table 1 of “Managing Land Contamination. Planning Guidelines. SEPP 55 – Remediation of Land”, and
- (d) any relevant sites listed in an agency database relating to contamination sources.

Note. The contamination sources listed in this Schedule may change during the period of this Plan. The Offices of the Department of Water and Energy, shown in Appendix 2, should be contacted for a current list.

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Schedule 5 High priority groundwater dependent ecosystems

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

Note. High priority groundwater dependent ecosystems 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 DWE 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.

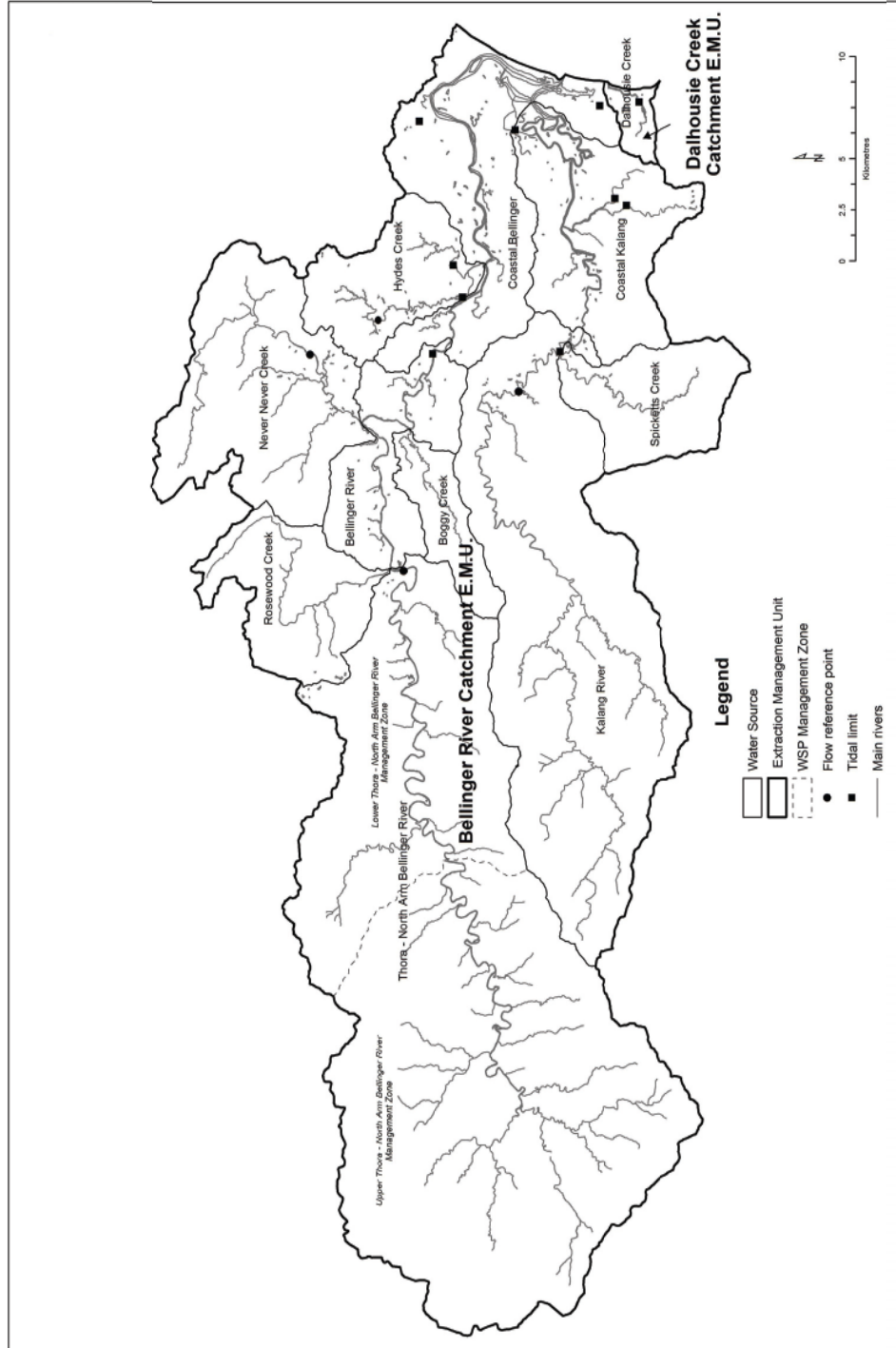
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Schedule 6 Beneficial use for the Bellinger River Area Unregulated and Alluvial Water Sources

Water Source	Beneficial Uses
Bellinger River	Irrigation and ecosystem protection
Boggy Creek	Irrigation and ecosystem protection
Coastal Bellinger	Irrigation and ecosystem protection
Coastal Kalang	Irrigation and ecosystem protection
Dalhousie Creek	Irrigation and ecosystem protection
Hydes Creek	Irrigation and ecosystem protection
Kalang River	Irrigation and ecosystem protection
Never Never	Irrigation and ecosystem protection
Rosewood Creek	Irrigation and ecosystem protection
Spicketts Creek	Irrigation and ecosystem protection
Thora - North Arm Bellinger River	Irrigation and ecosystem protection

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Appendix 1 Bellinger River Area Unregulated and Alluvial Water Sources and the Bellinger River Catchment and the Dalhousie Creek Catchment Extraction Management Units



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Appendix 2 Location of maps

The maps in relation to this Plan may be inspected at:

Department of Water and Energy
10 Valentine Ave
PARRAMATTA NSW 2150

Department of Water and Energy
The Harrington Building
41 Belgrave Street
KEMPSEY NSW 2440

Department of Water and Energy
AMP Centre
24 Gordon Street
COFFS HARBOUR NSW 2450

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