

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

[2008-2021]



New South Wales

## Status Information

### Currency of version

Historical version for 23 June 2008 to 9 December 2008 (accessed 25 May 2024 at 12:07)

Legislation on this site is usually updated within 3 working days after a change to the legislation.

### Provisions in force

The provisions displayed in this version of the legislation have all commenced.

### Notes—

- **See also**  
[Statute Law \(Miscellaneous Provisions\) Bill \(No 2\) 2008](#)

### Authorisation

This version of the legislation is compiled and maintained in a database of legislation by the Parliamentary Counsel's Office and published on the NSW legislation website, and is certified as the form of that legislation that is correct under section 45C of the [Interpretation Act 1987](#).

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



New South Wales

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



New South Wales

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

## 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.

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.

## **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,
  - (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.

### 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:
  - (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.

## **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.

### **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.

## **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.

## **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
- (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 0 ML/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.

**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.

## **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:
    - (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.

- (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.

## **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.
- (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.
- (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.
- (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.

#### **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.

#### **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
    - (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.

- (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.

## 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.

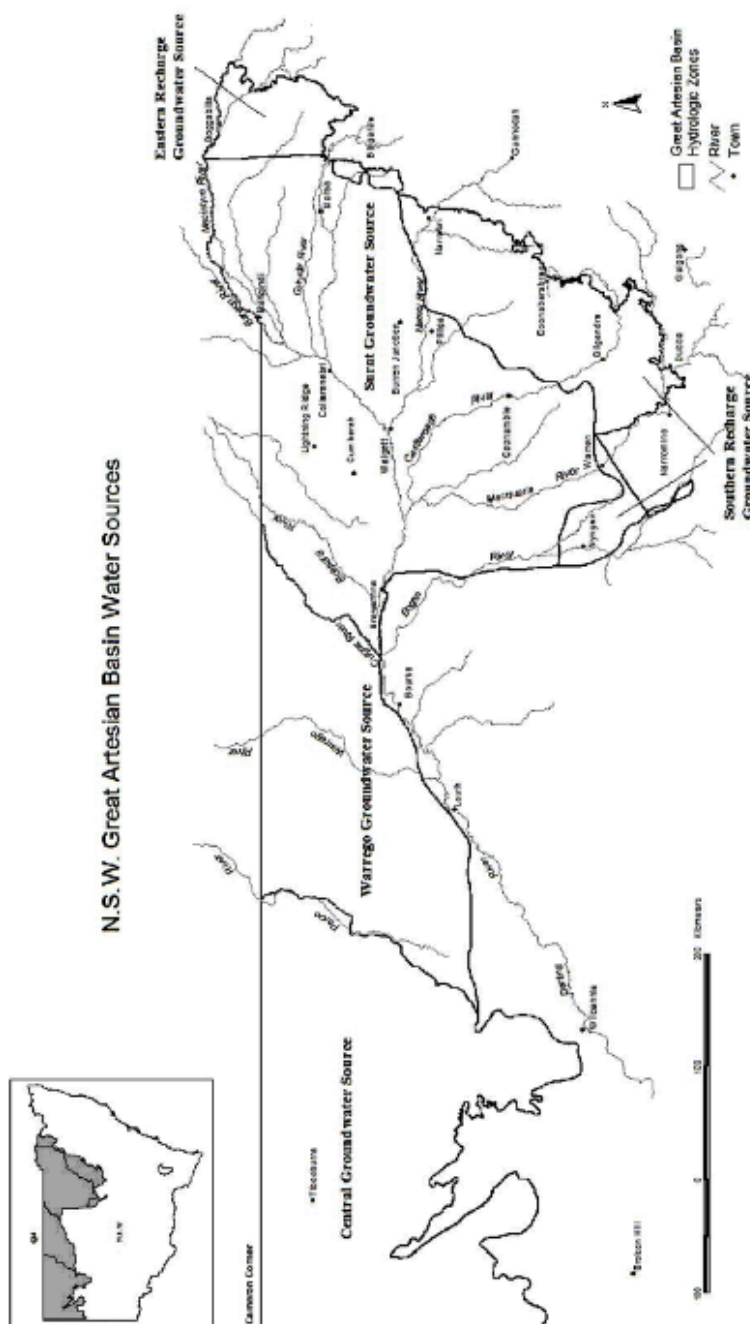
**net recharge** is the difference between recharge and the through flow water component required for the other groundwater sources.

**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.

## Schedule 2 Plan area



## Schedule 3 Contamination sources in the NSW Great Artesian Basin

## Groundwater Sources

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

### Schedule 4 Amendments

This plan identifies the following high priority groundwater dependent ecosystems:

Groundwater Dependent Ecosystem Name	Groundwater Dependent Ecosystem Classification	Location			
		Latitude S		Latitude E	
		Degrees	Minutes	Degrees	Minutes
Boongunyarrah 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
Tooloomi 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

## 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