

# Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003

[2003-188]



New South Wales

## Status Information

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### Provisions in force

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### Authorisation

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# Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003



New South Wales

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# Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003



New South Wales

## Part 1 Introduction

### 1 Name of Plan

This Plan is the *Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003* (hereafter **this Plan**).

### 2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* as amended (hereafter **the Act**).
- (2) This Plan covers the core provisions of section 20 of the Act for water sharing, and additional provisions of section 21 of the Act, and other relevant matters.

### 3 Date of commencement

This Plan takes effect on 1 October 2006, 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 the Murrumbidgee, Lachlan and Murray Water Management Areas known as the Lower Murrumbidgee Groundwater Sources (hereafter **these groundwater sources**) as shown on the map in Schedule 2.

#### Note—

The Murrumbidgee, Lachlan and Murray Water Management Areas are shown on the map in Appendix 1.

- (2) The groundwater sources referred to in this Plan are:
  - (a) the Lower Murrumbidgee Shepparton Groundwater Source (hereafter **the Shepparton**), characterised by yellow and brown poorly sorted sand and clay sediments that extend to a depth of between 50 and 70 metres below the ground surface, and
  - (b) the Lower Murrumbidgee Calivil and Renmark Groundwater Source (hereafter **the**

**Calivil and Renmark**), characterised by pale grey to white quartz sand layers, with lenses of grey to white clay, extending from the bottom of the Shepparton down to the bedrock, with a typical thickness of 100 to 300 metres.

**Note—**

Maps referred to in this plan may be inspected at offices of the Department of Land and Water Conservation listed in Appendix 2. A schematic representation of these groundwater sources is also available at these offices.

## **5 Waters to which this plan applies**

The water in these groundwater sources includes all water contained in the Shepparton, Calivil and Renmark unconsolidated alluvial aquifers.

## **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.

**Note—**

To the extent possible, the rules embodied in this Plan will apply to matters administered under the [Water Act 1912](#) in the interim.

## **8 State Water Management Outcomes Plan**

- (1) In accordance with section 16 (1) (a) of the Act this Plan is consistent with the State Water Management Outcomes Plan published in the NSW Government Gazette on 20 December 2002 (hereafter **the SWMOP**).
- (2) Schedule 3 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

## **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 for this Plan is the optimal, equitable and sustainable management of groundwater for environmental, economic and social purposes in the Lower Murrumbidgee.

### **11 Objectives**

The objectives of this Plan are to:

- (a) share groundwater sustainably between users and the environment,
- (b) share groundwater equitably amongst extractive users,
- (c) provide for basic landholder rights and priorities of use,
- (d) protect groundwater quality,
- (e) maximise the social, economic and environmental benefits of groundwater management strategies, and
- (f) minimise the negative social and economic impacts of groundwater management strategies.

### **12 Strategies**

The strategies of this Plan are to:

- (a) establish environmental water rules and manage access to groundwater consistent with those rules,
- (b) establish rules for the protection of basic landholder rights,
- (c) establish an extraction limit for each groundwater source, taking into account the requirements of the environment,
- (d) reduce the total share component of access licences in the Calivil and Renmark to 125% of the extraction limit in that groundwater source,
- (e) establish rules for the granting of access licences,
- (f) establish rules for determining the groundwater available from time to time under access licences,
- (g) establish water allocation account management rules,



- (h) establish rules for minimising the local impacts of groundwater extraction on the environment, the aquifer itself, and between users,
- (i) establish the access licence dealing rules, and
- (j) establish the mandatory conditions that will apply to all access licences and water supply work (bore) approvals.

### **13 Performance indicators**

For the purpose of section 35 (1) (b) of the Act, the following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in groundwater extraction relative to the extraction limits,
- (b) change in climate adjusted groundwater levels,
- (c) change in water levels adjacent to identified groundwater dependent ecosystems,
- (d) change in groundwater quality,
- (e) change in economic benefits derived from groundwater extraction and use,
- (f) change in structural integrity of the aquifer,
- (g) extent to which domestic and stock requirements have been met,
- (h) extent to which local water utility requirements have been met,
- (i) extent to which native title rights requirements have been met, and
- (j) extent of recognition of spiritual, social and customary values of groundwater to Aboriginal people.

**Note—**

Appendix 3 details the objectives to which these performance indicators relate and the methods for assessing these indicators.

## **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) (c) and 21 (e) of the Act.

### **15 Climatic variability**

- (1) This Plan recognises climatic variability and therefore that the level of natural recharge to these groundwater sources will vary.

- (2) To give effect to subclause (1), this Plan has provisions that manage:
- (a) the sharing of water in these groundwater sources within the limits of water availability on a long-term average basis, and
  - (b) water extractions to enable the protection of groundwater dependent ecosystems, aquifer integrity and water quality of these groundwater sources.

## **16 Recharge**

- (1) The overall basis for water sharing in this Plan is the average annual recharge to each groundwater source as follows:
- (a) 65,000 megalitres per year (hereafter **ML/yr**) to the Shepparton, and,
  - (b) 335,000 ML/yr to the Calivil and Renmark.

### **Note—**

These recharge figures incorporate some recharge from irrigation losses to the shallow groundwater system. It is expected that, as irrigation losses diminish through infrastructure refurbishment and water efficiency measures, this component of the recharge will also diminish.

- (2) Pursuant to section 42 (2) of the Act, the average annual recharge for each groundwater source established in subclause (1) may be varied by the Minister after 30 June 2008 following further recharge studies undertaken by the Minister.

### **Note—**

The extent of impact of this change on access by licence holders is limited by the provisions in clause 28.

## **Part 4 Environmental water provisions**

### **17 Environmental water provisions**

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (2) and 20 (1) (a) of the Act.

### **18 Environmental health water**

- (1) This Plan establishes the following environmental health water rules:
- (a) the long-term average storage component of each groundwater source, minus the basic landholder rights extraction, is reserved for the environment,
  - (b) 55,000 ML/yr of the average annual recharge to the Shepparton will be reserved for the environment, and
  - (c) 65,000 ML/yr of the average annual recharge to the Calivil and Renmark, minus the access permitted under supplementary water access licences, will be reserved for the environment.

- (2) Pursuant to section 42 (2) of the Act, the Minister may vary the proportion of recharge reserved as the environmental health water in subclause (1) after 30 June 2008, based on further studies of groundwater ecosystem dependency undertaken by the Minister.

**Note—**

The extent of impact of this change on access by licence holders is limited by the provisions in clause 28.

- (3) The Minister should consult with the Minister for the Environment before varying the environmental health water in accordance with subclause (2).

## **19 Supplementary environmental water**

At the commencement of this Plan, there is no water committed for specified environmental purposes in accordance with section 8 (1) (b) of the Act.

## **20 Adaptive environmental water**

- (1) At any time, an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The Minister may grant an access licence in a water source to which this Plan applies if the licence is subject to an adaptive environmental water condition and arises through water savings in the system made in that water source as referred to in section 8C (1) of the Act.
- (2A) The Minister may change the category or subcategory of an access licence in a water source to which this Plan applies if the licence is subject to an adaptive environmental water condition that arises through water savings as referred to in section 8D of the Act.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

## **Part 5 Basic landholder rights**

### **21 Basic landholder rights**

- (1) This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.
- (2) If a landholder is unable to exercise their basic landholder rights due to interference to supply caused by extraction authorised by access licences:
  - (a) the landholder's affected water supply work (bore) or pump equipment may be replaced or deepened to ensure continuing access to water for basic landholder rights, or
  - (b) basic rights water may be supplied by alternative means during critical times.
- (3) The Minister may impose a charge on access licence holders in these groundwater

sources under section 114 of the Act, as a contribution to the costs of activities or works associated with subclause (2).

**Note—**

The Minister may issue an Order under section 328 of the Act to restrict the exercise of basic landholder rights from these groundwater sources to protect the environment, for reasons of public health, or to preserve existing basic landholder rights.

**Note—**

Access for basic landholder rights is permitted without the need for an access licence. A works approval will, however, be required. Such works approvals are not subject to an embargo.

## **22 Domestic and stock rights**

**Note—**

It is not recommended that the water from these groundwater sources be consumed without prior treatment. Land use activities may have polluted the groundwater in some areas.

- (1) At the commencement of this Plan, the water requirements of holders of domestic and stock rights are estimated to be a total of 4,000 ML/yr, comprising:
  - (a) 3,000 ML/yr in the Shepparton,
  - (b) 1,000 ML/yr in the Calivil and Renmark,
- (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 overlying these groundwater sources, or as a result of the increase in the exercise of basic landholder rights by existing landholders.

## **23 Native title rights**

- (1) At the commencement of this Plan there are no holders of native title rights and therefore the water requirements for native title rights are a total of 0 ML/yr.
- (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](#).

## **Part 6 Bulk access regime**

### **24 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 climatic 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 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 2 of this Plan,
  - (e) establishes rules according to which access licences are managed as provided for in Parts 9 and 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 for extraction under access licences**

### **25 Estimate of water requirements**

- (1) This Part is made in accordance with section 20 (1) (c) of the Act.
- (2) At the commencement of this Plan, the requirements identified for water for extraction under access licences within these groundwater sources are estimated to be as follows:
  - (a) 0 ML/yr in the Shepparton, and
  - (b) 522,233 ML/yr in the Calivil and Renmark,
- (3) Subclause (2) includes local water utility access licences of 2,210 ML/yr in these groundwater sources, made up of:
  - (a) 0 ML/yr in the Shepparton, and

- (b) 2,210 ML/yr in the Calivil and Renmark, being for Carrathool, Coleambally and Darlington Point.

**Note—**

Subclauses (2) and (3) represent the total volumes specified on access licences in these groundwater sources. These are not a commitment to supply that water.

- (4) Pursuant to section 42 (2) of the Act, and at the commencement of year six of this plan the Minister should reduce the total share components of aquifer access licences specified in subclause (2) in the Calivil and Renmark to 125% of the extraction limit determined in clause 27, according to the following;

$$\text{Amended access licence share component} = \text{access licence share component prior to amendment} \times \left( \frac{(1.25(\text{recharge} - \text{EHW})) - \text{LWU}}{\text{Total access licence share components prior to amendment} - \text{LWU}} \right)$$

- (5) Recharge in subclause (4) is the recharge established in clause 16 (1), as amended by clause 16 (2).
- (6) EHW in subclause (4) is the volume of recharge reserved as environmental health water in the Calivil and Renmark in clause 18 (1), as amended by clause 18 (2).
- (7) LWU in subclause (4) is the total of local water utility access licence share components in the Calivil and Renmark existing prior to any access licence amendments under subclause (4).
- (8) Subclause (4) does not apply to the share components of local water utility access licences.
- (9) At the time of commencement of Part 2 of Chapter 3 of the Act, aquifer access licences in the Calivil and Renmark with a history of extraction greater than 80% of the aquifer access licence share component, as amended by subclause (4), will have a second licence, called a supplementary water access licence.
- (10) A supplementary water access licence referred to in subclause (9), will have an initial share component equivalent to the history of extraction, minus 80% of the aquifer access licence share component, as if amended by subclause (4).
- (11) The history of extraction referred to in subclauses (9) and (10) will be the greater of:
- (a) the average extraction over the seven water years from 1995/96 to 2001/02, or the average of the years within that period from which extraction was first measured, not exceeding the access licence share component equivalent in 2001/02, or
  - (b) the average extraction over the five water years from 1997/98 to 2001/02, or the average of the years within that period from which extraction was first measured,

not exceeding the access licence share component equivalent in 2001/02.

- (12) Share components of all supplementary water access licences will be reduced to 0 ML/yr at 30 June 2012.
- (13) This Plan recognises that the total requirements for water for extraction under access licences within these groundwater sources may change during the term of this Plan as a result of:
  - (a) the granting, surrender, non-renewal or cancellation of access licences,
  - (b) the variation of local water utility access licences under section 66 of the Act, or
  - (c) the volumetric quantification of the share components of existing access licences that are currently non-volumetric.

## **Part 8 Rules for granting access licences**

### **26 Rules for granting access licences**

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 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) Access licences may be granted in these groundwater sources, subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in these groundwater sources, other than access licences of the following kinds:
  - (a) local water utility access licences,  
**Note—**

Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's licence at 5 yearly intervals, or on application of the local water utility where there is a rapid growth in population.
  - (b) access licences within the Shepparton that access water from less than 20 metres below the ground surface and, in the opinion of the Minister, are in areas where the water table has risen, and lowering of the water table is required, and only if the total access licence share components in the Shepparton remain below 10,000 ML/yr, or
  - (c) access licences resulting from an application of a type listed in section 82 (1) of the Act.
- (4) Notwithstanding subclause (3), if for any reason additional aquifer access licences are

granted in the Calivil and Renmark, other than those specified in subclause (3), and after aquifer access licence share component have been amended in accordance with clause 25:

- (a) any such additional share components will be granted to those licences subject to share component amendment under clause 25,
  - (b) such distribution of share components will be on an equal proportional basis, and
  - (c) any additional share component plus existing share component will not exceed the share component existing immediately prior to the amendment under clause 25.
- (5) In applying for a new access licence, the applicant must establish the purpose and circumstance relating to that access licence, and that the share and extraction component sought will be the minimum required to meet that purpose and circumstance.
- (6) Access licences granted under this Part cannot be used to extract water through a water supply work (bore) located in areas where the extraction authorised by the licence, plus the full extraction authorised by existing access licences nominating water supply works (bores) located in the area, and the exercise of basic landholder rights, are likely to cause an adverse local impact, as outlined in Part 10 Division 3 of this Plan.
- (7) If an access licence share component applied for is significant, as determined by the Minister on the basis of particular aquifer characteristics:
- (a) the application will not be granted until a water supply work (bore) approval has been granted and the work constructed, and
  - (b) once the water supply work (bore) is constructed, and the results of a pumping test or its equivalent are supplied by the applicant, in the required form and to the specification of the Minister, the access licence may be granted.
- (8) The share component of the access licence granted under subclause (7) will be the proportion of the share component sought that the water supply work (bore) is capable of extracting without causing any adverse local impact as outlined in Part 10 Division 3 of this Plan.
- (9) Subclauses (5), (7), and (8) do not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act.
- (10) In accordance with section 56 of the Act, all access licences in these groundwater sources shall have a share component expressed as a volume in megalitres per year.



## **Part 9 Limits to the availability of water**

### **Division 1 Long-term average extraction limits**

#### **27 Long-term average extraction limits**

- (1) This Division is made in accordance with section 20 (2) (a) of the Act.
- (2) The long-term average extraction limit for each groundwater source each year of this Plan is the recharge established in clause 16, plus the total supplementary access provided for in clause 25, as varied by clause 29, minus the proportion of recharge reserved as environmental health water in clause 18, and is as follows:
  - (a) 10,000 ML/yr in the Shepparton, and
  - (b) 270,000 ML/yr in the Calivil and Renmark, plus the total supplementary access provided for in clause 25, as varied by clause 29.

#### **28 Variation of the long-term extraction limit**

- (1) Pursuant to section 42 (2) of the Act, the Minister may vary the long-term average extraction limit established under clause 27 (2) (b) after 30 June 2008 as a result of:
  - (a) any change to the average annual recharge arising from clauses 16 (2), and
  - (b) any change to the environmental health water arising from clause 18 (2).
- (2) If there is any change to the long-term average extraction limit arising from subclause (1) then:
  - (a) the extraction limit will not be greater than 390,000 ML/yr in the Calivil and Renmark, plus the total supplementary access provided for in clause 25, as varied by clause 29, and
  - (b) the long term extraction limit will not be less than 230,000 ML/yr in the Calivil and Renmark, plus the total supplementary access provided for in clause 25, as varied by clause 29.

### **Division 2 Available water determinations**

#### **29 Available water determinations**

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:
  - (a) water extraction in each groundwater source will be monitored each water accounting year to determine if any growth in volumes extracted is occurring

above the extraction limit in clause 27, based on a comparison of the extraction limit against the average extraction within the groundwater source over that year and the preceding 2 years,

**Note—**

A water accounting year is defined in clause 34 (3).

- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in the aquifer for environmental purposes, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work (bore),
- (d) total water available under aquifer access licences will be equal to the recharge established in clause 16, minus the proportion of recharge reserved for the environment in clause 18, minus the total water available to local water utility access licences,
- (e) if the 3 year average of extraction in a groundwater source exceeds the long-term average extraction limit established in clause 27 by 5% or greater, the available water determination for the following water accounting year for aquifer access licences in that groundwater source 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,
- (f) if the 3 year average of extraction in a groundwater source is less than 95% of the long-term average extraction limit established in clause 27, then the available water determination for aquifer access licences in that groundwater source shall be increased to such an extent as to allow extraction to increase to that extraction limit,
- (g) notwithstanding subclause (f), the available water determination shall not exceed 100% of total aquifer access licence share components,
- (h) the available water determination calculated in accordance with subclauses (e) and (f) will apply to all access licences in the groundwater source excepting local water utility and supplementary water access licences, and will be the same percentage of aquifer access licence share component for all access licences to which it applies,
- (i) separate available water determinations will be made in each groundwater source each water year for local water utility access licences, and subject to section 60 of the Act, these shall be 100% of these access licence share components,

- (j) an available water determination of 90% of supplementary water access licence share components will be made in Year 1 of this Plan,
- (k) the available water determination for supplementary access licences will be reduced by a further 10% of the supplementary water access licence share component each year of this Plan, and
- (l) there will be no water made available under supplementary water access licences in Year 10 of this Plan.

## **Part 10 Rules for managing access licences**

### **Division 1 General**

#### **30 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**

#### **31 Water allocation account management**

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

#### **32 Water allocation accounts**

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

**Note—**

Water allocations may be assigned to, or from, these accounts by a water allocation assignment made under section 71G of the Act, where these are allowed under rules specified in Part 11 of this Plan.

#### **33 Accrual of water allocations**

Water allocations will be accrued into these water allocation accounts each water accounting year in accordance with the Minister's available water determinations as specified in clause 29.

#### **34 Annual accounting for water extraction**

- (1) Water taken from these groundwater sources will be accounted for at least annually.

- (2) Water taken by an approved water supply work (bore) nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) In any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 3 of this Plan, water taken from any of these groundwater sources under an aquifer access licence may not exceed a volume consisting of:
  - (a) 100% of the access licence share component,
  - (b) plus any water allocations assigned from another licence under section 71G of the Act in that year, and
  - (c) minus any water allocations assigned to another licence under section 71G of the Act in that year.
- (5) Total water in any aquifer access licence account at any time may not exceed a volume consisting of:
  - (a) 150% of the aquifer access licence share component,
  - (b) plus any water allocations assigned from another licence under section 71G of the Act in that year, and
  - (c) minus any water allocations assigned to another licence under section 71G of the Act in that year.
- (6) A maximum of 50% of any aquifer access licence share component may be carried forward in a water allocation account from one water accounting year to the next.
- (7) Subclauses (4), (5), and (6) do not apply to local water utility or supplementary water access licences.
- (8) For local water utility access licences in any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 3 of this Plan, water taken from any of these groundwater sources, and total water in any water allocation account at any time, may not exceed a volume consisting of:
  - (a) 100% of the access licence share component,
  - (b) plus any water allocations assigned from another licence under section 71G of the Act in that year,
  - (c) minus any water allocations assigned to another licence under section 71G of the Act in that year.

- (9) Allocations in a local water utility water allocation account cannot be carried over from one water accounting year to the next.
- (10) Pursuant to section 42 (2) of the Act, the limits specified in subclauses (4) (a), (5) (a) and (6) may be varied by the Minister after July 1 2008.
- (11) If any variation is made in accordance with subclause (10), the limit in subclause (4) (a) will not exceed 150%, the limit in subclause (5) (a) will not exceed 200%, and the limit in subclause (6) will not exceed 100%.
- (12) Subclauses (4) to (11) do not apply to supplementary water access licences.
- (13) For supplementary water access licences, in any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 3 of this Plan, water taken from any of these groundwater sources may not exceed the allocation arising from supplementary water access licence available water determination.
- (14) Allocations in a supplementary water access licence water allocation account cannot be carried over from one water accounting year to the next.
- (15) Where both an aquifer access licence, and a supplementary water access licence are held, water allocations will be debited from an aquifer access licence account to the limit specified in subclause (4), before water is debited from a supplementary water access licence account.
- (16) A water allocation account shall remain at or above zero at all times.

## **Division 3 Management of local impacts**

### **35 Management of local impacts**

This Division is made in accordance with section 21 (a) of the Act.

### **36 Water level management**

- (1) The Minister may declare that, in order to protect water levels within these groundwater sources, local access rules are to apply in a defined area known as a local impact area.
- (2) Local extraction restrictions will first apply once contoured drawdown or recovery depths exceed trigger levels specified by the Minister for 2 or more successive years, or unacceptable levels of drawdown or recovery specified by the Minister are observed in a single year.
- (3) Local extraction restrictions will apply to such an extent and for such time as to reduce the rate of pressure decline, or in response to unacceptable seasonal drawdown or recovery, to ensure pressure recovery occurs to acceptable levels.

- (4) Local extraction restrictions may increase to prevent unacceptable seasonal drawdown and unacceptable recovery levels, as specified by the Minister.
- (5) In the Shepparton, if depth to watertable outside areas where the water table has risen unnaturally, and its lowering is required, is identified as having a declining trend to the extent that local ecosystems could be adversely impacted upon by year 10 of this Plan, then a review of extraction by access licence holders in the affected area will be undertaken.
- (6) If the review in subclause (5) reveals it is required, extraction will be restricted in the local impact area to such an extent and for such a time as required to stabilise and if necessary restore the watertable to an appropriate level, as determined by the Minister.
- (7) This clause does not apply to local water utility access licences.

**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.

Groundwater pressures are referenced to the top of the relevant aquifer. A local impact area is to be identified from a map of the piezometric surface change, showing seasonal, annual or longer patterns of drawdown or recovery in an aquifer.

### **37 Water quality management**

- (1) The beneficial uses of these groundwater sources, based on the beneficial use classes identified in the Australian and New Zealand Environment and Conservation Council *Water Quality Guidelines 2001*, and the National Health and Medical Research Council *Raw Water for Drinking Purposes Guidelines 1996*, are:
  - (a) ecosystem protection and agricultural water for the Shepparton, and
  - (b) raw water for drinking, ecosystem protection and agricultural water for the Calivil and Renmark,

**Note—**

It is not recommended that the groundwater from these water sources be consumed without prior treatment. Land use activities may have polluted the groundwater in some areas.

- (2) Water quality decline will be deemed unacceptable if extraction is likely to cause water quality to decline to a lower beneficial use class.
- (3) The Minister may declare that, in order to protect water quality within these groundwater sources, local access rules are to apply in a defined area known as a local impact area.
- (4) If unacceptable water quality declines are occurring, extraction from all water supply

works (bores) within a local impact area declared under subclause (3) that are nominated by an access licence will be restricted to such an extent and for such a time as is required to halt that decline, or restore the beneficial uses of these groundwater sources.

### **38 Protection of groundwater dependent ecosystems**

- (1) High priority groundwater dependent ecosystems are listed in Schedule 4.
- (2) Pursuant to section 42 (2) of the Act, the Minister may identify further high priority groundwater dependent ecosystems and include them in Schedule 4 after 30 June 2008, based on further studies of groundwater ecosystem dependency undertaken by the Minister.
- (3) The Minister should consult with the Minister for the Environment before adding further high priority groundwater dependent ecosystems to Schedule 4.
- (4) Extraction of groundwater from a new or replacement water supply work (bore) is excluded within 200 metres of designated high priority groundwater dependent ecosystems, or any creek or river, for those exercising basic landholder rights, and 1,000 metres for extraction authorised by all other access licences, unless the water supply work (bore):
  - (a) only draws water from an aquifer at depths as approved by the Minister, and
  - (b) has an impermeable seal constructed within the annulus of the bore to isolate aquifers preventing water ingress from the restricted aquifer, as specified by the Minister.
- (5) Subclause (4) will not apply to extraction from an existing water supply work (bore) until such time as the work is replaced.

### **39 Protection of aquifer integrity**

- (1) The Minister may declare that, in order to protect the integrity of the aquifers within these groundwater sources, local access restrictions are to apply in a defined area known as a local impact area.
- (2) The Minister may, on presentation of evidence of land subsidence or aquifer compaction, restrict extraction from all water supply works (bores) within a local impact area declared under subclause (1), that are nominated by an access licence, to such an extent and for such time as to stabilise that subsidence or compaction.

#### **Note—**

This clause recognises that damage of aquifers through excessive water storage loss is irreversible, and destroys the resource for future water users, including the environment.

#### **40 Extraction restrictions**

The Minister may, in the event of local impact restrictions arising from this Division, impose by Order a reduction in annual, quarterly, monthly, weekly or daily extraction rates from water supply works (bores) in the affected area.

#### **41 Group registration**

This Plan allows for the formation of a group of access licences with respect to the sharing of local impact restrictions arising from this Division, subject to the following rules:

- (a) the group register will be maintained by the Minister,
- (b) holders of access licences must make a request to the Minister to form a group,
- (c) total extraction by all access licences within a group will be assessed as a whole against their combined restricted extraction and must not exceed that amount,
- (d) no access licence holder within the group may extract more than is permitted by Division 2 of this Part in any one water accounting year as a result of participation in a group,
- (e) an access licence holder may apply to be removed by the Minister from the group and the extraction by the group will be reduced by the extraction restriction of that access licence,
- (f) an access licence holder may apply to be added by the Minister to the group and the combined restricted extraction of the group will be increased by the extraction restriction of that access licence, and
- (g) the Minister reserves the right to remove a licence holder from a group where that individual causes the group extraction restriction to be exceeded, or to dissolve a group where its members exceed their combined extraction restriction.

#### **42 Infrastructure failure**

- (1) The operational rules relating to local impact management 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 any other monitoring bore information, until the monitoring bore is reinstated, or
  - (c) rely on another monitoring bore in the area to provide information.



## **Part 11 Access licence dealing rules**

### **43 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 27 December 2002 under section 71L of the Act.

**Note—**

The Minister's access licence dealing principles are contained in Appendix 4.

- (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 71L of the Act and the rules in this Part.

**Note—**

There are a number of mechanisms within the Act, called access licence dealings, to change either the ownership 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, 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 71L of the Act provides for the access licence dealing rules in this Plan to prevail.

### **44 Rules relating to constraints within a groundwater source**

- (1) This clause applies to any relevant dealings under sections 71D, 71F, and 71J of the Act, and section 71G of the Act with respect to water allocation assignments within a groundwater source.
- (2) Dealings are prohibited under this clause if:
  - (a) any of the access licences or water allocations involved are not within these groundwater sources,
  - (b) the dealing would result in the total extraction under access licences through nominated works in an area, plus basic landholder rights extraction, causing any adverse local impact in accordance with Part 10 Division 3 of this Plan, or
  - (c) the dealing involves a supplementary water access licence, or any water allocation credited to a supplementary water access licence water allocation account.

### **45 Rules for change of water source**

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

**Note—**

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

- (2) Dealings under this section 71E of the Act that change the water source to which an access licence applies are prohibited in these groundwater sources, except as provided for in this clause,
- (3) An access licence with a share component specifying one of these groundwater sources may be cancelled and a new licence issued specifying another of these groundwater sources only if the total share components of all access licences in the groundwater source in which the access licence is issued remains below the extraction limit for that groundwater source established in clause 27.
- (4) The volume of the share component on a licence issued under a dealing provided for in subclause (3) is to be the volume of the cancelled access licence share component.

#### **46 Rules for conversion of access licence category**

- (1) This clause relates to dealings under section 71B of the Act.
- (2) Dealings that result in conversion of an access licence of one category to an access licence of another category are prohibited in these groundwater sources.

#### **47 Rules for interstate access licence transfer**

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

#### **48 Rules for water allocation assignments between water sources**

- (1) This clause relates to dealings under section 71G of the Act for assignment of water allocations between water sources.
- (2) Dealings that assign water allocations between access licences in other water sources and access licences in these groundwater sources are prohibited.
- (3) Dealings that assign water allocations between an access licence in one of these groundwater sources and an access licence in another of these groundwater sources may be permitted only if:
  - (a) the total water allocations credited to all access licences in the groundwater source to which the water allocation is assigned remain below the extraction limit of that groundwater source established in clause 27, and
  - (b) the assignment would not result in the total extraction of credited water

allocations through nominated works in an area, plus basic landholder rights extraction, causing any adverse local impact in accordance with Part 10 Division 3 of this Plan,

(c) the assignment is not from or to a supplementary water access licence.

**Note—**

Each water allocation assignment must be applied for. access licence holders may enter into private contracts to assign water allocations for a number of years. Such contracts are not guaranteed by the Government, and approval must be sought annually. Approval will be subject to the rules in this Plan, including local impact assessment.

**49 Rules for interstate assignment of water allocations**

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

**Part 12 Mandatory conditions**

**50 Mandatory conditions on access licences**

This Part is made in accordance with sections 17 (c) and 20 (2) (e) of the Act.

**51 Access licence conditions**

- (1) All access licences shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
  - (a) the specification of the share component of the access licence,
  - (b) the specification of the extraction component of the access licence,
  - (c) the requirement that all taking of water under the access licence will be subject to the available water determinations,
  - (d) the requirement that all taking of water under the access licence will be subject to any local impact management restrictions established in this Plan,
  - (e) the requirement that all taking of water under the access licence will be subject to the account management rules established in this Plan,
  - (f) the requirement that water may only be taken under the access licence by the water supply work (bore) nominated by the access licence,
  - (g) the taking of water in accordance with the access licence may only occur if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account, and

- (h) any other conditions required to implement the provisions of this Plan.
- (2) All aquifer access licences shall have mandatory conditions to give effect to clause 25, in relation to the amendment of access licence share components.
- (3) All supplementary water access licences shall have mandatory conditions to give effect to clause 25, in relation to the amendment of access licence share components.
- (4) 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 or for other such purpose provided for under the Act.

## **52 Mandatory conditions on water supply work (bore) approvals**

All approvals for a water supply work (bore) to which this Plan applies shall have mandatory conditions in relation to the following:

- (a) the water supply work (bore) is only to be constructed by a driller licensed under section 349 of the 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 maintain access to the water source for the life of the work,
- (f) the water supply work (bore) approval holder is, within 2 months of completion of the work, 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) a plan showing accurately the location of the work in relation to portion and property boundaries, and
  - (iii) details of any water analysis and/or pumping tests required by the Minister,
- (g) if during the construction of the water supply work (bore), saline or contaminated water is encountered above the producing 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 walls of the bore hole from the bottom of the casing to ground level, as specified by the Minister,
- (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) an extraction measurement device shall be installed and maintained on each water supply work (bore) used for extraction of water under an access licence, and such device 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 management rules in Part 10 of this Plan,
- (k) notwithstanding the available water determination, it is the responsibility of the water supply work (bore) approval holder to ascertain from the Minister whether or not there are in place any local impact restrictions before commencing to take water from these groundwater sources,
- (l) extraction under an access licence through the approved water supply work (bore) is only authorised with respect to the access licences specified on the water supply work (bore) approval,
- (m) 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), and
- (n) any other conditions required to implement the provisions of this Plan.

**Note—**

It is recommended that the Minister also apply conditions to water use approvals requiring the supply of information on an annual basis on types and areas of irrigated crops.

## **Part 13 Monitoring and reporting**

### **53 Monitoring**

The monitoring 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 43 (2) of the Act, this Plan is to be reviewed, within the fifth year of its term, for the

purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles of the Act.

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 a water management committee where one exists.

**Note—**

The 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 will be included in the annual report for the Department of Land and Water Conservation.

## **Part 14 Amendment of this Plan**

### **54 Amendment of this Plan**

- (1) This Part is made in accordance with section 42 (2) of the Act.
- (2) This Plan can be amended in accordance with the following clauses of this Plan:
  - (a) clause 16 in respect to average annual recharge,
  - (b) clause 18 in respect to environmental health water,
  - (c) clause 25 in respect to share components of access licences,
  - (d) clause 28 in respect to long-term average extraction limits,
  - (e) clause 34 in respect to the water allocation account management rules, or
  - (f) clause 38 in respect to high priority groundwater dependent ecosystems.

### **55 Amendment relating to planned environmental water**

- (1) The Minister may amend this Plan to provide for the recovery of planned environmental water as follows:
  - (a) the recovery is only to apply where the Minister has cancelled an access licence held by the Minister in accordance with section 8A of the Act,
  - (b) the amount of additional water to be provided as planned environmental water is to be equivalent to the annual average extraction of water under the cancelled licence over the long-term,

(c) the average annual long-term availability of water for the remaining access licences that relate to the water source concerned is to be reduced by the average annual long-term extraction of water under the cancelled licence.

(2) The Minister may amend this Plan to specify the purposes for which planned environmental water committed under section 8A of the Act is to be used.

## Dictionary

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

**abandoned** (work) refers to a water supply work (bore) that is no longer being used.

**aquifer compaction** refers to the reduction in the porosity (pore spaces) of an aquifer, and may result from over pumping the aquifer.

**available head** is the difference between the depth to the top of the target aquifer, and an initial piezometric level.

**available water** in relation to a water management area or water source, is the water that is available in that area or water source in accordance with an available water determination that is in force in respect of that area or water source.

**available water determination** is a written Order by the Minister as to the availability of water for the various categories of access licence in relation to a specified water management area or water source.

### Note—

An available water determination gives rise to a water allocation that is credited to a water allocation account for each licensed holder.

**bedrock** is the solid rock underlying unconsolidated sediments such as the soil and weathered rock. Bedrock is a general term for solid rock that lies beneath soil, loose sediments, or other unconsolidated material.

**buffer zone** is an area surrounding a groundwater dependent ecosystem or other feature (such as an area of low quality) within which extraction, or the impact of extraction, is restricted.

**contoured drawdown or recovery depths** refers to spatial water levels data indicating drawdown or lack of recovery.

**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.

**extraction limit** is the amount of the long-term average annual recharge and storage that can be extracted, on average, each water accounting year.

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

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

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

**piezometric surface (potentiometric surface)** is a surface that represents the level to which water will rise in cased bores. (The watertable is the potentiometric surface of an unconfined aquifer).

**recharge** is the addition of water, usually by infiltration, to an aquifer.

**recovery depths** see contoured drawdown

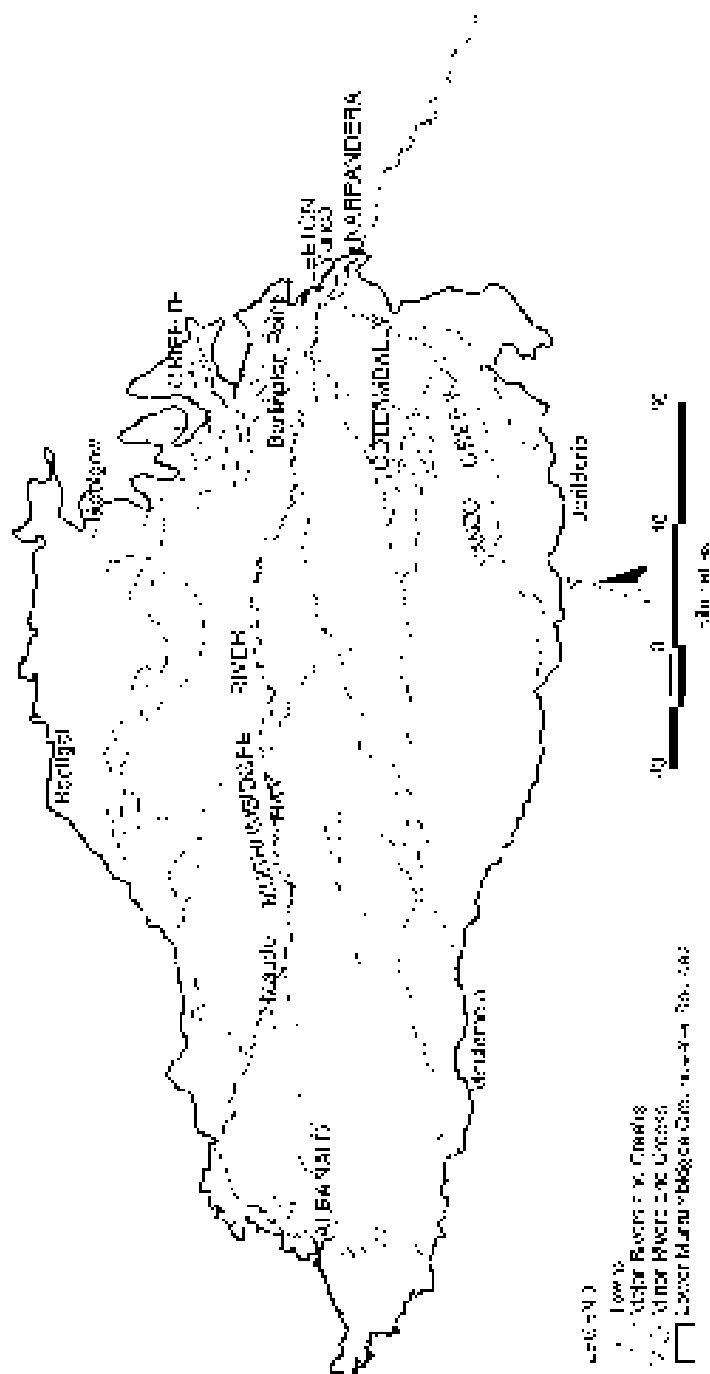
**share component** is the share component of an access licence.

**unconsolidated alluvial aquifers** are aquifers formed by sediment deposited by the action of flowing water in particular along river beds and floodplains, but not including lakes and seas.

**watertable** is the upper surface of an unconfined aquifer.



## Schedule 2 Lower Murrumbidgee Groundwater Sources



## Schedule 3 Contribution to targets in the State Water Management Outcomes Plan

### Level of assessed contribution:

FULL—contributes to target in full

HIGH—while not fully contributing to target, there is a good level of contribution

PARTIAL—goes some way to contributing to the target

LOW—only small degree of contribution to target

Relevant target	Level of contribution	Comments
<p><b>Target 1e</b> The long term average annual extractions for groundwater limited (or being phased down) to an ecologically sustainable level (the Sustainable Yield) as determined by detailed assessment of each groundwater source and consultation with the relevant management committee. In the absence of such an assessment, the following to apply: 100 percent of average annual recharge for a groundwater source where there is no significant ecosystem dependency; 70 percent of average annual recharge where there is significant ecosystem dependency</p>	FULL	<ul style="list-style-type: none"> <li>This Plan establishes as extraction limit of 15% of recharge in the Shepparton groundwater source, and phases extraction down to 80% of recharge in the Calivil and Renmark groundwater source.</li> </ul>
<p><b>Target 1f</b> 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</p>	FULL	<ul style="list-style-type: none"> <li>Rules set out in Part 9.</li> </ul>
<p><b>Target 2</b> 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</p>	HIGH	<ul style="list-style-type: none"> <li>This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any designated high priority dependent groundwater ecosystems (Schedule 4 which nominates prior streams) or any creek or river.</li> <li>Part 10 sets out local impact management rules in response to local groundwater pressure or level declines, and groundwater quality impacts.</li> </ul>

**Target 5** Access rights for water access licensees clearly and legally specified in terms of share and extraction components HIGH

- This Plan establishes transparent extraction limits and allocation/account rules.
- This Plan embargos new licence applications.
- Licences are tradeable.
- The local extraction rules means that future rights will not be exclusive but affected by the future location of works. Licences with existing bores will have priority over licences requiring new bores.

**Target 6a** For groundwater sources, the total volume of water specified on access licences reduced over the term of a water sharing plan to no more than 125 percent of the Sustainable Yield FULL

- The total licence volumes for the Calivil/Renmark groundwater source is greater than 125% of the extraction limit.
- However, this Plan proposes to reduce the total licence volumes to 125% by year 6 of this Plan.

**Target 10** Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable baseflows to the river to be maintained or improved HIGH

- There is little information in this Plan on connectivity, other than that the prior streams in the Shepparton groundwater source but not on the Calivil/Renmark groundwater source are connected.
- These should be protected by reserving 85% of recharge to the Shepparton groundwater source.
- This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any creek or river.

<p><b>Target 11</b> Groundwater dependent ecosystems identified and mapped for all priority aquifers, and the ecological water requirements assessed to enable local groundwater extraction rates and/or Sustainable Yields to be reviewed</p>	<p>HIGH</p>	<ul style="list-style-type: none"> <li>• The ecosystems directly dependent on the Shepparton groundwater source, but not on the Calivil/Renmark groundwater source, are listed in Schedule 4.</li> <li>• They should be protected by reserving 85% of recharge and to the Shepparton aquifer.</li> <li>• This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any designated high priority dependent groundwater ecosystems (Schedule 4 which nominates only prior streams) or any creek or river.</li> <li>• Part 10 sets out local impact management rules in response to local groundwater pressure or level declines, and groundwater quality impacts.</li> </ul>
<p><b>Target 12</b> 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</p>	<p>HIGH</p>	<ul style="list-style-type: none"> <li>• This Plan has identified the volumes necessary to meet basic domestic and stock requirements.</li> <li>• It also protects domestic and stock bores from interference from higher yielding bores.</li> </ul>
<p><b>Target 13</b> 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</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> <li>• 1 Aboriginal community representative has been involved in development of this Plan.</li> </ul>
<p><b>Target 14</b> 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</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> <li>• No Aboriginal cultural or traditional sites or requirements have been identified.</li> <li>• The environmental health provisions should protect dependent ecosystems of importance to Aboriginal people.</li> <li>• Licence volumes and water allocations are tradeable.</li> </ul>
<p><b>Target 16a</b> All share components of access licences tradeable</p>	<p>FULL</p>	<ul style="list-style-type: none"> <li>• However this Plan proposes the necessary reduction in licence volumes to occur by year 6 therefore the market may be distorted by this higher level of entitlement in the meantime.</li> </ul>

<p><b>Target 16e</b> Any unassigned access rights identified and clear mechanisms established for their future assignment</p>	FULL	<ul style="list-style-type: none"> <li>• Rules in place to grant licences in the Shepparton groundwater source.</li> </ul>
<p><b>Target 16f</b> Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit</p>	HIGH	<ul style="list-style-type: none"> <li>• This Plan does not establish but restricts transfers within these groundwater sources such that there are no unacceptable impacts on existing users or the environment.</li> </ul>
<p><b>Target 35</b> 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</p>	HIGH	<ul style="list-style-type: none"> <li>• This Plan includes a water quality objective, and establishes rules to protect water quality.</li> <li>• This Plan is explicit about the beneficial uses and criteria.</li> </ul>
<p><b>Target 38</b> Aquifer water quality vulnerability zones mapped and extraction limits reviewed to reduce the risk of lateral intrusion of poor quality water</p>	PARTIAL	<ul style="list-style-type: none"> <li>• No vulnerability mapping of area is referenced in this Plan.</li> <li>• This Plan includes rules for managing the impacts of extraction on water quality.</li> </ul>

## Schedule 4 High priority groundwater dependent ecosystems

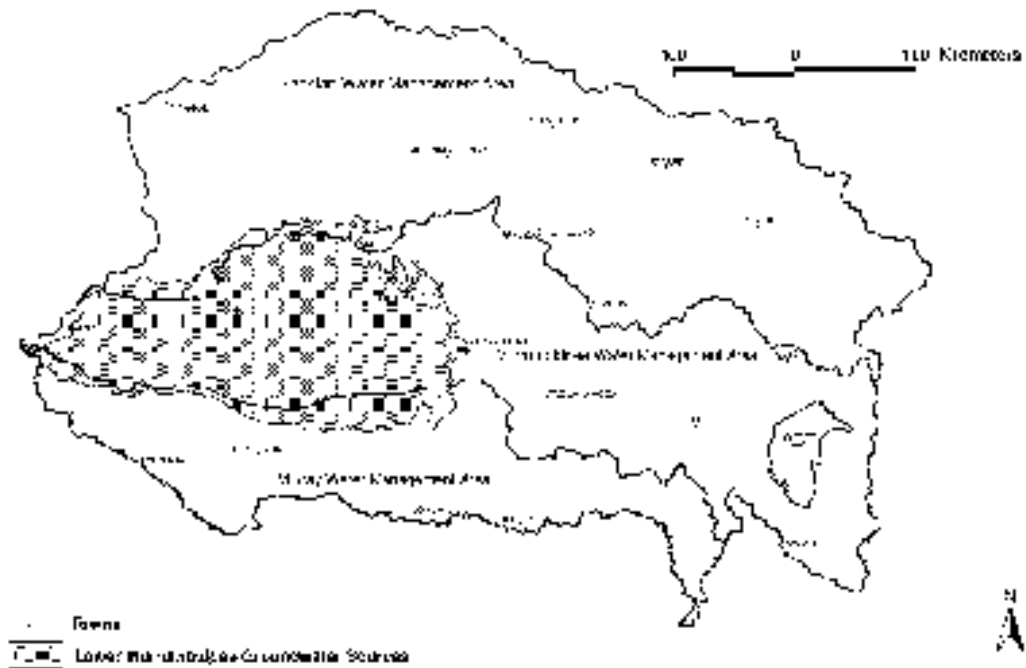
High priority groundwater dependent ecosystems in the Lower Murrumbidgee Groundwater Sources are, 'Prior streams' as shown on Sheet 1 of 3 drawings accompanying in the *Murrumbidgee Local Environment Plan 1994*.

**Note—**

The high priority groundwater dependant ecosystems listed in this Schedule may change during the period of this Plan. The offices of the Department of Land and Water Conservation, shown in Appendix 2, should be contacted for a current list.

## Appendix 1 Murrumbidgee, Lachlan and Murray Water Management

## Areas



## Appendix 2 Location of maps

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

Regional Office  
Department of Land and Water Conservation  
43 Johnston Street  
WAGGA WAGGA NSW 2650

District Office  
Department of Land and Water Conservation  
Chelmsford Place  
LEETON NSW 2705

District Office  
Department of Land and Water Conservation  
8-20 Edwardes Street  
DENILIQVIN NSW 2710

District Office  
Department of Land and Water Conservation  
126 Lachlan Street  
HAY NSW 2711

## Appendix 3 Performance indicators

### Performance indicators for the Lower Murrumbidgee Groundwater Sources Water Sharing Plan

<b>Performance indicator</b>	<b>Related objectives</b>	<b>As measured by</b>	<b>Commentary</b>
(a) Change in groundwater extraction relative to the extraction limits.	11 (a), 11 (b) and 11 (c)	<ul style="list-style-type: none"> <li>Average annual extraction volume for the groundwater source as a percentage of the extraction limit.</li> </ul>	<ul style="list-style-type: none"> <li>Plan provisions will set the mechanism to remain within the extraction limit over the long-term.</li> </ul>
(b) Change in climate adjusted groundwater levels.	11 (a), 11 (b) and 11 (e)	<ul style="list-style-type: none"> <li>Average annual frequency and duration (in days) of water level drawdown below pre-plan baseline.</li> <li>Density of extraction in critical areas.</li> <li>Identification of groundwater dependent ecosystems (GDEs).</li> <li>Assessment of the relationship between selected GDEs and local groundwater levels in terms of the water requirements of these GDEs.</li> </ul>	<ul style="list-style-type: none"> <li>Note that water levels will fluctuate with climate and resultant variable recharge. Some level declines will be expected during dry times, just as level rises are expected during wetter periods.</li> </ul>
(c) Change in water levels adjacent to identified groundwater dependent ecosystems.	11 (a), and 11 (c)	<ul style="list-style-type: none"> <li>Assessment of the adequacy of buffer zones or local impact restrictions by comparison of water levels near or in GDEs compared to plan baseline.</li> <li>Frequency and duration of water level drawdown below critical levels.</li> </ul>	<ul style="list-style-type: none"> <li>Groundwater dependent ecosystems should be identified in the water sharing plans.</li> </ul>
(d) Change in groundwater quality relative to beneficial use.	11 (a), 11 (c), 11 (d), and 11 (f)	<ul style="list-style-type: none"> <li>Trends in selected water quality parameters at selected monitoring bores that are likely to be affected by groundwater extraction.</li> </ul>	<ul style="list-style-type: none"> <li>Note that many water quality issues are a function of contamination by land based activities, rather than extraction.</li> </ul>

<p>(e) Change in economic benefits derived from groundwater extraction and use.</p>	<p>11 (b), 11 (c), 11 (e), and 11 (f)</p>	<ul style="list-style-type: none"> <li>• Change in regional gross margins</li> <li>• Change in unit price of water transferred.</li> </ul>	<ul style="list-style-type: none"> <li>• Note that there are many factors affecting economic status of a region, for example commodity prices, other sources of water (i.e. surface water) etc.</li> <li>• Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of the plan provisions.</li> </ul>
<p>(f) Change in structural integrity of the aquifer.</p>	<p>11 (a), 11 (b) and 11 (e)</p>	<ul style="list-style-type: none"> <li>• Annual number of reports of new land subsidence and reduced bore yields.</li> <li>• Survey if necessary.</li> <li>• Monitor increase in applications for water supply work (bore) approvals.</li> </ul>	
<p>(g) Extent to which domestic and stock rights have been met.</p>	<p>11 (a), 11 (b) and 11 (e)</p>	<ul style="list-style-type: none"> <li>• Number of reports of interference between high yield extraction and basic landholder rights, or number of domestic and stock bores deepened.</li> <li>• Assess frequency and duration of water level drawdown below critical thresholds.</li> </ul>	<ul style="list-style-type: none"> <li>• Basic landholder rights usage figures in water sharing plans are estimated (not actual use).</li> <li>• Increases in licences may be due to past unlicensed works.</li> </ul>
<p>(h) Extent to which local water utility requirements have been met.</p>	<p>11 (a), 11 (b), 11 (d), and 11 (e)</p>	<ul style="list-style-type: none"> <li>• Monitor increase in access by local water utilities.</li> <li>• Monitor impact of interference between high yield extraction and local water utility extraction.</li> </ul>	



		<ul style="list-style-type: none"><li>• Monitor increase in applications for water supply work (bore) approvals for native title basic landholder rights.</li></ul>
(i) Extent to which native title rights requirements have been met.	11 (c) and 11 (e)	<ul style="list-style-type: none"><li>• Number of reports of interference between high yield extraction and native title rights holders, or number of bores deepened.</li><li>• Assess frequency and duration of water level drawdown below critical thresholds.</li></ul>
(j) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.	11 (c) and 11 (e)	<ul style="list-style-type: none"><li>• Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people.</li><li>• The collection of information on the values associated with water is considered the first step in addressing the objects of the Act.</li><li>• It would be expected that at the end of five years there should be relevant information collected for each groundwater source, as a minimum requirement.</li></ul>

## Appendix 4 Minister's access licence dealing principles

The following is the text from the Access Licence Dealing Principles Order, published in the NSW Government Gazette on 27 December 2002.

### Access Licence Dealing Principles Order 2002

#### Part 1 Introduction

##### 1 Name of Order

This Order is the *Access Licence Dealing Principles Order 2002*.

##### 2 Commencement

This Order commences on 20 December 2002.

##### 3 Establishment of access licence dealing principles

The access licence dealing principles set out in this order are established.

#### 4 Interpretation

- (1) References in this order to licences of category 'runoff harvesting' or 'regulated river (conveyance)' are subject to those categories being prescribed by regulation made under section 57 (k) of the Act.
- (2) Notes in this order do not form part of the order.

#### 5 Effect

- (1) Consistent with section 71K (1) of the Act, all applications for access licence dealings under Division 4 of Part 2 of Chapter 3 of the Act are to be dealt with in accordance with:
  - (a) the water management principles, and
  - (b) the principles in this order, and
  - (c) access licence dealing rules established by any relevant management plan.
- (2) Consistent with section 71L of the Act, any access licence dealing rules established by management plans must be consistent with the principles in this order.

#### 6 Definitions

In this order the following definitions apply:

**dealing** means a dealing under Chapter 3, Part 2 Division 4 of the [Water Management Act 2000](#).

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

**groundwater source** means a water source specified in a groundwater management plan.

**hydrologically connected** water sources are water sources where water from one flows into the other, or, in the case of river systems, where flow from both goes into a common river downstream.

**management plan** means a plan made under section 41 or 50 of the [Water Management Act 2000](#).

**regulated river water source** means a water source specified in a regulated river management plan.

**runoff harvesting dam** is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of

the *Water Management Act 2000*.

**unregulated river water source** means a water source specified in an unregulated river management plan.

## Part 2 General principles

### 7 Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.
- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
  - (a) the total volume of share components, or
  - (b) the total volume of water allocations in water allocation accounts, or
  - (c) where relevant, the sum of limits on rates of extraction in extraction components.

### 8 Impacts on indigenous, cultural, heritage or spiritual matters

- (1) Dealings should not adversely affect geographical and other features of indigenous significance.
- (2) Dealings should not adversely affect geographical and other features of major cultural, heritage or spiritual significance.

## **9 Impacts on water users**

- (1) Dealings should not adversely affect the ability of a person to exercise their basic landholder rights.
- (2) Dealings should have no more than minimal effect on the ability of a person to take water using an existing approved water supply work and any associated access licences. This should be addressed by constraints on dealings established in access licence dealing rules in relevant management plans.

## **10 Maximising social and economic benefits**

- (1) The objective of access licence dealings is to help to facilitate maximising social and economic benefits to the community of access licences as required under the objects of the Act. Dealings do this by:
  - (a) allowing water to move from lower to higher value uses, and
  - (b) allowing the establishment of water markets that value the access licences, thereby encouraging investment in water efficient infrastructure, and
  - (c) allowing greater flexibility to access licence holders.
- (2) Subject to other principles in this order, access licence dealing rules should allow maximum flexibility in dealings to promote the objectives set out in subclause (1).

## **Part 3 Principles for specific types of access licence dealings**

### **11 Transfer of access licences**

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of the licence, or
  - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

**Note—**

as indicated in section 71A (3), consent to the transfer of a local water utility access licence may only be granted if the transferee is a local water utility, and consent to the transfer of a major water utility access licence may only be granted if the transferee is a major water utility.

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

- (1) This clause applies to access licence dealings under section 71B of the Act.

- (2) Dealings under section 71B are prohibited:
  - (a) if the licence is proposed to be converted to category regulated river (conveyance) or category estuarine or category coastal, or
  - (b) if there is an outstanding debt under the Act in respect of the licence, or
  - (c) if the licence is suspended under section 78 of the Act, or
  - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
  - (e) if the licence share component is not numerically quantified.
- (3) Dealings under section 71B are prohibited unless provisions of the relevant management plan:
  - (a) protect environmental water from being affected by such dealings, and
  - (b) protect basic landholder rights from being affected by such dealings, and
  - (c) protect the available water under other access licences from being affected by such dealings.
- (4) The share and extraction components of a new licence issued under a dealing under section 71B must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act for the new category.
- (5) Except for where it is otherwise specified in access licence dealing rules in the relevant management plan or where this dealing is accompanied by a dealing under section 71E, water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licence, up to a maximum of the share component volume of the new licence.
- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
  - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
  - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.

- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
  - (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
  - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
  - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
  - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act), and
  - (c) the application for conversion of category from regulated river (general security) to unregulated river must be accompanied by an application under section 71E to change the share component to an unregulated river water source, and is conditional on granting of that application, and
  - (d) water allocations remaining in the water allocation account on the cancelled licence may not be credited to the new licence.
- (13) For conversion of category from unregulated river to runoff harvesting:
  - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and

- (b) the extraction component of the new licence is to specify a location or area which is not on a river (apart from a minor stream as defined in an order made under section 53 of the Act), and
  - (c) the application for conversion of category from unregulated river to runoff harvesting access licence must be accompanied by an application under section 71J to nominate the water supply work to a runoff harvesting dam, and is conditional on granting of that application.
- (14) For conversion of category from runoff harvesting to unregulated river:
- (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and
  - (b) the extraction component of the new licence is to specify a location or area which is on an unregulated river (apart from a minor stream as defined in an order made under section 53 of the Act).
- (15) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

**Note—**

Under section 71B applications to convert local water utility access licences and supplementary access licences are prohibited, and licences granted are subject to the mandatory conditions applicable to the category or subcategory of licence to which it belongs. Also licences may only be granted in relation to the same water source or water management area as the cancelled licence.

**13 Subdivision of access licences**

- (1) This clause applies to subdivision dealings under section 71C of the Act.
- (2) Dealings under section 71C are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of the licence, or
  - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.

- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

**Note—**

As indicated in section 71C (3), the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licence are to be carried over to the new licences.

**14 Consolidation of access licences**

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
  - (b) if any of the licences are suspended under section 78 of the Act, or
  - (c) if the licences to be consolidated do not have share components in the same water source, or
  - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.
- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.
- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

**Note—**

as indicated in section 71C, the licences to be consolidated must be of the same category or subcategory, the combined share components and combined extraction components of the new licences are to be no greater than the share and extraction components of the cancelled licence, and conditions on the cancelled licences are to be carried over to the new licences.

**15 Assignment of rights under access licences**

- (1) This clause applies to assignment of rights dealings under section 71D of the Act.



- (2) Dealings under section 71D are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
  - (b) if any of the licences are suspended under section 78 of the Act, or
  - (c) if any of the licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act.
- (3) Only share or extraction components, or parts thereof, that are numerically quantified may be assigned from one licence to another.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

**Note—**

As indicated in section 71D, the licences which are involved in a dealing under section 71D must be of the same category and have share components in the same water source or water management area. This dealing does not apply to local water utility access licences.

**16 Change of water source**

- (1) This clause applies to amendment of share component dealings under section 71E of the Act.
- (2) Dealings under section 71E are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of the licence, or
  - (b) if the licence is suspended under section 78 of the Act, or
  - (c) if the licence does not have the share component expressed as a volume, or
  - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
  - (e) from an unregulated river water source to a regulated river water source, or
  - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
  - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:

- (a) protect environmental water from being affected by such dealings, and
  - (b) protect basic landholder rights from being affected by such dealings, and
  - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factors rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
  - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
- (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
- (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

**Note—**

As indicated in section 71E, the new licence arising from a dealing under section 71E is subject to the mandatory conditions relevant to its category or subcategory and water source. This dealing does not apply to local water utility access licences.

**17 Amendment of extraction component of access licence**

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
- (a) if there is an outstanding debt under the Act in respect of the licence,
  - (b) if the licence is suspended under section 78 of the Act, or

- (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
  - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
  - (b) those rules specifically indicate the nature of those amendments which are allowed.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

**Note—**

As indicated in section 71F, the area or location arising from a variation of an access licence under this dealing must relate to the same water management area or water source as that to which the original area or location related.

**18 Assignment of water allocations between access licences**

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
  - (a) if either of the access licences is suspended under section 78 of the Act, or
  - (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
  - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
  - (d) if any of the access licences is of category runoff harvesting, or
  - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
  - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:

- (a) either licence is of category supplementary, or
  - (b) there is no hydrologic connection between the water sources, or
  - (c) one water source is a regulated river and the other is an unregulated river, or
  - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
  - (b) protect basic landholder rights from being affected by such dealings, and
  - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
  - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
  - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

## **19 Interstate transfer dealings**

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of the licence, or

- (b) if the licence is suspended under section 78 of the Act, or
  - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
  - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
- (a) protect environmental water from being affected by such dealings, and
  - (b) protect basic landholder rights from being affected by such dealings, and
  - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

## **20 Interstate assignment of water allocations**

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71I are prohibited:
- (a) if the access licence is suspended under section 78 of the Act, or
  - (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
  - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
  - (d) if the access licence is of category runoff harvesting or supplementary water, or
  - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:

- (a) protect environmental water from being affected by the dealing, and
  - (b) protect basic landholder rights from being affected by the dealing, and
  - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
  - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
  - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

## **21 Nomination of water supply works**

- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.
- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
- (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or
  - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
- (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or

- (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
  - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
  - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.