

Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003

[2003-190]



New South Wales

Status Information

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Provisions in force

None of the provisions displayed in this version of the legislation have commenced.

Notes—

- **Does not include amendments by**
[Water Management Act 2000 No 92](#) (amended by [Water Management Amendment Act 2005 No 118](#))
(not commenced — to commence on 1.1.2006)

Authorisation

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New South Wales

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Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003



New South Wales

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Lower Macquarie 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 July 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 Macquarie Water Management Area known as the Lower Macquarie Groundwater Sources (hereafter **these groundwater sources**) as shown in Schedule 2.

Note—

The Macquarie Water Management Area is shown on a map in Appendix 1.

Note—

Maps referred to in this Plan may be inspected at offices of the Department of Land and Water Conservation listed in Appendix 2.

- (2) The following groundwater sources referred to in this Plan are shown on the map in Schedule 2:
 - (a) Lower Macquarie Zone 1 groundwater source (hereafter **Zone 1**),

- (b) Lower Macquarie Zone 2 groundwater source (hereafter **Zone 2**),
- (c) Lower Macquarie Zone 3 groundwater source (hereafter **Zone 3**),
- (d) Lower Macquarie Zone 4 groundwater source (hereafter **Zone 4**),
- (e) Lower Macquarie Zone 5 groundwater source (hereafter **Zone 5**), and
- (f) Lower Macquarie Zone 6 groundwater source (hereafter **Zone 6**).

Note—

The Lower Macquarie Groundwater Sources were previously known as Groundwater Management Area 008. Zones 1, 2, 3, 4, and 5 were previously known as 8A, 8B, 8C, 8D and 8E, respectively. Zone 6 was previously within the Upper Macquarie Groundwater Management Area 009.

5 Waters to which this Plan applies

The waters in these groundwater sources include all water contained in the unconsolidated alluvial aquifers and the sandstone aquifers of the Great Artesian Basin within the area to which this Plan applies.

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 to ensure the ecological, social, cultural and economic sustainability of the Lower Macquarie Groundwater Sources.

11 Objectives

The objectives of this Plan are to:

- (a) maintain, and if necessary restore groundwater dependent ecological processes and biodiversity,

Note—

Subclause (a) is an environmental objective. The outcomes of this objective would include: the identification of dependent ecosystems and their critical ecological processes; identification and measurement of key indicators of dependent ecosystem health; the implementation of management systems to support high priority dependent ecosystems' ecological processes and, the environmental impacts of management change as assessed against the Vision.

- (b) optimise or maximise the social outcomes of groundwater management,

Note—

Subclause (b) is a social objective. The outcomes of this objective would include: no decline in groundwater quality as a result of extraction; sustainable groundwater source for present and future generations; priority of access for town water supply and basic rights; and social impacts of management changes defined and assessed against the Vision.

- (c) contribute to a sustainable regional economy,

Note—

Subclause (c) is an economic objective. The outcomes of this objective would include: access to the resource clearly defined (reliability, trading and other management); and, economic impacts of management changes defined and assessed against the Vision.

- (d) recognise and respect Aboriginal cultural responsibilities and obligations to the landscape, and

- (e) preserve and enhance the cultural benefits and values derived from groundwater.

Note—

Subclauses (d) and (e) are cultural objectives. The outcomes of these objectives would be to have the

cultural benefits and values of the Lower Macquarie Groundwater Sources identified, and the cultural impacts of management changes defined and assessed against the Vision.

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 share component of all access to 125% of the extraction limit in each 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, on the aquifer itself, and between users,
- (i) establish the access licence dealing rules, and
- (j) establish the conditions that will apply to 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 rights 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 in 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) 25,500 megalitres per year (here after **ML/yr**) in Zone 1,
 - (b) 26,600 ML/yr in Zone 2,
 - (c) 11,000 ML/yr in Zone 3,
 - (d) 6,000 ML/yr in Zone 4,
 - (e) undefined in Zone 5, and
 - (f) 9,600 ML/yr in Zone 6.
- (2) A review of recharge for each groundwater source should be undertaken by the Minister by the end of year 2 of this Plan, that should:

- (a) recommend an average annual recharge for Zone 5, and
 - (b) recommend any changes to the average annual recharge for Zones 1, 2, 3, 4 and 6.
- (3) Pursuant to Section 42 (2) of the Act, the average annual recharge to each groundwater source established in subclause (1) may be varied by the Minister at the end of year 4 of this Plan, following the review of each average annual recharge established in subclause (2), and this variation should:
- (a) establish the average annual recharge in Zone 5, and
 - (b) revise the estimated average annual recharge for each of Zones 1, 2, 3, 4 and 6.
- (4) The Minister should undertake a second review of the average annual recharge for each groundwater source by the end of year 8 of this Plan.
- (5) Pursuant to Section 42 (2) of the Act, the average annual recharge to each groundwater source established in subclause (1), as varied by subclause (3), may be varied by the Minister at the end of year 9 of this Plan, following the second review of average annual recharge established in subclause (4).
- (6) The Minister shall cause to have undertaken an independent evaluation of the reviews established in subclauses (2) and (4) and such review is to be undertaken prior to any change to this Plan by the Minister under subclauses (3) and (5).
- (7) The Minister will seek advice from the Water Management Committee, or in its absence an advising committee established by the Minister, including, where possible, local representatives of domestic and stock rights groundwater users, water utilities, irrigation and industry, Aboriginal persons, and environment groups, before making any changes to this Plan under subclauses (3) and (5).

Note—

The extent of impact of these changes 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

Note—

It is anticipated that the environmental health water provisions in this Part, and management of local impacts provisions in Part 10 of this Plan, will also preserve and enhance the cultural benefits and values derived from groundwater (see clause 11 (e)).

- (1) This Plan establishes the following environmental health water rules:
 - (a) subject to Part 10 Division 2 of this Plan, the long-term average storage component of each groundwater source, minus the basic landholder rights, is reserved for the environment, and
 - (b) subject to Part 10 Division 2 of this Plan, 15% of the average annual recharge to each groundwater source, will be reserved for the environment, and Aboriginal cultural heritage.
- (2) A review of the proportion in subclause 1 (b) reserved as environmental health water in each groundwater source, should be undertaken by the Minister at the end of year 2 of this Plan and should:
 - (a) recommend the proportion of the annual average recharge to be reserved for the environment and Aboriginal cultural heritage in Zone 5,
 - (b) recommend any change to the proportion of the annual average recharge to be reserved for the environment and Aboriginal cultural heritage in each of Zones 1, 2, 3, 4 and 6, and
 - (c) identify groundwater dependent ecosystems, establish their groundwater requirements and recommend appropriate management options to protect them.
- (3) Pursuant to Section 42 (2) of the Act, the Minister may vary the portion of average annual recharge reserved as environmental health water in each groundwater source in subclause (1) at the end of year 4 of this Plan, based on the review established in subclause (2), and this variation should:
 - (a) establish the proportion of the annual average recharge to be reserved for the environment and Aboriginal cultural heritage in Zone 5,
 - (b) if required, change the proportion of the annual average recharge to be reserved for the environment and Aboriginal cultural heritage in each of Zones 1, 2, 3, 4 and 6, and
 - (c) designate further high priority groundwater dependent ecosystems, and include them in Schedule 4.
- (4) The Minister should undertake a second review of the proportion of the average annual recharge reserved as environmental health water in each groundwater source, by the end of year 8 of this Plan.
- (5) Pursuant to Section 42 (2) of the Act, the Minister may vary the proportion of the average annual recharge reserved as environment health water in subclause (1), as varied by subclause (3), at the end of year 9 of this Plan, following a review established in subclause (4).

- (6) The Minister shall cause to have undertaken an independent evaluation of the reviews established in subclauses (2) and (4) prior to any change to this Plan in accordance with subclauses (3) and (5).
- (7) The Minister will seek advice from the Water Management Committee, or in its absence a steering committee established by the Minister, including, where possible, representatives of domestic and stock rights and groundwater users, local water utilities, irrigation and industry, Aboriginal persons, environment groups, before making any changes to this Plan under subclauses (3) and (5).

Note—

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

- (8) The Minister should consult with the Minister for the Environment before varying environmental health water in accordance with subclauses (3) and (5).
- (9) Any change in environmental health water arising from subclauses (3) and (5) shall not result in the proportion of recharge reserved for the environment being less than 10%, or greater than 30% in any groundwater source.

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 conditions of the commitment specified in subclause (1):
 - (a) are to be established by the Minister,
 - (b) are to be specified on the access licence, and
 - (c) shall be such as to ensure that there is a contribution to the objectives of this Plan.
- (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 their supply caused by extraction from works nominated by access licences:

- (a) the landholder's affected water supply work (bore) 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.

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 1,730 ML/yr, comprising:
- (a) 70 ML/yr in Zone 1,
 - (b) 315 ML/yr in Zone 2,
 - (c) 520 ML/yr in Zone 3,
 - (d) 215 ML/yr in Zone 4,
 - (e) 445 ML/yr in Zone 5, and
 - (f) 165 ML/yr in Zone 6.
- (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 domestic and stock 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 10 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 a total of 137,301 ML/yr, as follows:
- (a) 34,784 ML/yr in Zone 1,
 - (b) 33,253 ML/yr in Zone 2,
 - (c) 39,446 ML/yr in Zone 3,
 - (d) 20,470 ML/yr in Zone 4,
 - (e) 1,880 ML/yr in Zone 5, and
 - (f) 7,468 ML/yr in Zone 6.

Note—

Subclause (2) represents the total volumes specified on access licences in these groundwater sources. It is not a commitment to supply that water.

- (3) Subclause (2) includes local water utility access licences of 3,093 ML/year in these groundwater sources, made up of:
- (a) 2,000 ML/yr in Zone 1, being for Narromine,
 - (b) 1,090 ML/yr in Zone 3, being for Trangie, Warren and Nevertire, and
 - (c) 3 ML/yr in Zone 6, being for Narromine.
- (4) Pursuant to section 42 (2) of the Act, the Minister should reduce the total share components of aquifer access licences in each groundwater source specified in subclause (2) to 125% of the extraction limits determined in clause 27 over the term of this Plan, according to the following:
- (a) at the end of year 4, each aquifer access licence in a groundwater source (Zone) will have an access licence share component calculated as follows:

$$\text{Amended aquifer access licence share component} = \text{Aquifer access licence share component prior to amendment} \times \left(\frac{(1.5 \times (\text{Recharge} - \text{EHW})) - \text{EX}}{(\text{total Zone access licence share components prior to amendment} - \text{EX})} \right)$$

- (b) at the end of year 9, each aquifer access licence in a groundwater source (Zone) will have an access licence share component calculated as follows:

$$\begin{array}{l} \text{End of year 9} \\ \text{amended} \\ \text{aquifer access} \\ \text{licence share} \\ \text{component} \end{array} = \begin{array}{l} \text{aquifer access} \\ \text{licence share} \\ \text{component} \\ \text{prior to year 9} \\ \text{amendment} \end{array} \times \left(\frac{(1.25 \times (\text{Recharge} - \text{EHW})) - \text{EX}}{(\text{total Zone access licence share} \\ \text{components prior} \\ \text{to year 10 amendment} - \text{EX})} \right)$$

- (5) Recharge in subclause (4) (a) is the recharge for the groundwater source established in clause 16 (1), as amended by clause 16 (3).
- (6) EHW in subclause (4) (a) is the volume of recharge reserved as environmental health water in the groundwater source established in clause 18 (1), as amended by clause 18 (3).
- (7) Recharge in subclause (4) (b) is the recharge for the groundwater source established in clause 16 (1), as amended by clause 16 (5).
- (8) EHW in subclause (4) (b) is the volume of recharge reserved as environmental health water in the groundwater source established in clause 18 (1), as amended by clause 18 (5).
- (9) EX in subclause (4) is the total share components of access licences in the groundwater source exempt from access licence share component reductions, including the total of local water utility access licence share components in the groundwater source, and the total of domestic and stock access licence share components in the groundwater source.
- (10) Subclause (4) does not apply to:
- (a) access licences in groundwater sources (Zones) where the 125% of the recharge minus the environmental health water, is greater than the total Zone access licence share component prior to amendment, or
 - (b) local water utility and domestic and stock access licences.
- (11) 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 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, or

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 resulting from an application of a type listed in section 82 (1) of the Act.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstance relating to that access licence, and that the share component sought will be the minimum required to meet that purpose and circumstance.
- (5) Access licences granted under this Part cannot be used to extract water through a water supply work (bore) located in areas where the full extraction authorised by 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.
- (6) If an access licence share component applied for is significant, as determined by the Minister on the basis of particular aquifer characteristics, the application will not be granted until a water supply work (bore) approval has been granted and the work constructed.
- (7) 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 (4), (6), (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, except Zone 5, is the recharge established in clause 16, minus the proportion of recharge reserved as environmental health water in clause 18, and are initially as follows:
 - (a) 21,680 ML/yr in Zone 1,
 - (b) 22,610 ML/yr in Zone 2,
 - (c) 9,350 ML/yr in Zone 3,
 - (d) 5,100 ML/yr in Zone 4, and
 - (e) 8,160 ML/yr in Zone 6.
- (3) For Zone 5, until the average annual recharge and the proportion of recharge reserved for the environment are established under clauses 16 and 18, the long term average extraction limit is taken to be 1,880 ML/yr, being the requirements for water at the commencement of this plan identified in clause 25 (2).

28 Variation of the long-term average extraction limits

- (1) Pursuant to section 42 (2) of the Act, the Minister may vary the long-term average extraction limits established under clause 27 at the end of year 4 of this plan as a result of:
 - (a) any change to the average annual recharge arising from clause 16 (3), and
 - (b) any change to the environmental health water arising from clause 18 (3).
- (2) If there is any change to the long-term average extraction limits arising from subclause (1) then:
 - (a) in Zone 1 the extraction limit will not be more than 27,540 ML/yr, and will not be less than 16,065 ML/yr,

- (b) in Zone 2 the extraction limit will not be more than 28,730 ML/yr, and will not be less than 16,760 ML/yr,
 - (c) in Zone 3 the extraction limit will not be more than 11,880 ML/yr, and will not be less than 6,930 ML/yr,
 - (d) in Zone 4 the extraction limit will not be more than 6,480 ML/yr, and will not be less than 3,780 ML/yr,
 - (e) in Zone 5 the extraction limit will not be less than 1,880 ML/yr, and
 - (f) in Zone 6 the extraction limit will not be more than 10,370 ML/yr, and will not be less than 7,340 ML/yr.
- (3) Pursuant to section 42 (2) of the Act, the Minister may vary the long-term average extraction limits established under clause 27 at the end of year 9 of this plan as a result of:
- (a) any change to the average annual recharge arising from clause 16 (5), and
 - (b) any change to the environmental health water arising from clause 18 (5).
- (4) If there is any change to the long-term average extraction limits arising from subclause (1) then:
- (a) in Zone 1 the extraction limit will not be less than 16,065 ML/yr,
 - (b) in Zone 2 the extraction limit will not be less than 16,760 ML/yr,
 - (c) in Zone 3 the extraction limit will not be less than 6,930 ML/yr,
 - (d) in Zone 4 the extraction limit will not be less than 3,780 ML/yr,
 - (e) in Zone 5 the extraction limit will not be less than 1,880 ML/yr, and
 - (f) in Zone 6 the extraction limit not be less than 7,340 ML/yr.

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 in each water accounting year to determine if any growth in volumes extracted is occurring above the extraction limit in clause 27, as varied by clause 28, based on 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) an available water determination will be made in each groundwater source each water year for aquifer access licences,
- (e) until the end of year 4 of this Plan, if the 3 year average of extraction in a groundwater source exceeds 90% of the long-term average extraction limit established in clause 27, 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 keep subsequent total water extraction to the long-term average extraction limit,
- (f) until the end of year 4 of this Plan, if the 3 year average of extraction in a groundwater source is less than 90% 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 towards that extraction limit,
- (g) notwithstanding subclause (f), the available water determination shall not exceed 100% of total access licence share components,
- (h) from the start of year 5 of this Plan, the available water determination for each aquifer access licence in each groundwater source will be that aquifer access licence's share of the recharge established in clause 16, minus the proportion of recharge reserved for the environment in subclause 18, minus the total water available to local water utility and domestic and stock access licences,
- (i) the available water determination for aquifer access licences will be expressed as a percentage of the aquifer access licence share component, will apply to all aquifer access licences in the groundwater source, and will be the same percentage for all access licences to which it applies, and
- (j) separate available water determinations will be made for both local water utility

and domestic and stock access licences, and subject to section 60 of the Act, these shall be 100% of these access licence share components.

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 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 shall be accounted for at least annually.
- (2) Water taken through an approved water supply work (bore) nominated by an access licence is taken to be extracted and shall 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 until the end of year 4 of this Plan, 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) Until the end of year 4 of this Plan, total water in any account at any time may not exceed a volume consisting of:
 - (a) 100% 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) Until the end of year 4 of this Plan, water allocations in an aquifer access licence water allocation account, cannot be carried over from one water accounting year to the next.
- (7) In any one water accounting year from the start of year 5 of this Plan, 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) 115% of the access licence share component, as amended by clause 25,
 - (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.
- (8) From the start of year 5 of this Plan, total water in any account at any time may not exceed a volume consisting of:
 - (a) 130% of the aquifer access licence share component, as amended by clause 25
(4) (a),
 - (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.
- (9) From the start of year 5 of this Plan, a maximum of 30% of an aquifer access licence share component may be carried over in a water allocation account from one water accounting year to the next.
- (10) Subclauses (4) to (9) do not apply to domestic and stock and local water utility access licences.
- (11) For domestic and stock and 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) plus any water allocations recredited in accordance with section 76 of the Act in that year, and
 - (d) minus any water allocations assigned to another licence under section 71G of the Act in that year.
- (12) Allocations in a local water utility or domestic and stock access licence water allocation account cannot be carried over from one water accounting year to the next.
- (13) 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 Extraction interference between neighbouring bores

- (1) To minimise interference between extraction under different access licences in Zones 1, 2 and 6, extraction from a new water supply work (bore) nominated by an access licence shall not be permitted within:
 - (a) 1,000 metres (hereafter **m**) of an existing water supply work (bore) nominated by an access licence, if the new water supply work (bore) will extract up to and including 10 ML/day,
 - (b) 2,000 m of an existing water supply work (bore) nominated by an access licence,

- if the new water supply work (bore) will extract greater than 10 ML/day and up to and including 20 ML/day, and
- (c) 3,000 m of an existing water supply work (bore) nominated by an access licence, if the new water supply work (bore) will extract greater than 20 ML/day.
- (2) To minimise interference between extraction under different access licences in Zones 3, 4 and 5 extraction from a new water supply work (bore) nominated by an access licence shall not be permitted within:
- (a) 1,000 m of an existing water supply work (bore) nominated by an access licence, if the new water supply work (bore) will extract up to and including 5 ML/day,
- (b) 2,500 m of an existing water supply work (bore) nominated by an access licence, if the new water supply work (bore) will extract greater than 5 ML/day and up to and including 10 ML/day,
- (c) 3,500 m of an existing water supply work (bore) nominated by an access licence, if the new water supply work (bore) will extract greater than 10 ML/day and up to and including 15 ML/day, and
- (d) 4,000 m of an existing water supply work (bore) nominated by an access licence, if the new water supply work (bore) will extract greater than 15 ML/day.
- (3) The distances and daily extraction rates referred to in subclauses (1) and (2) shall be specified on the new water supply work (bore) approval.
- (4) All new water supply works (bores) that are screened, slotted, or in any way open, within the Great Artesian Basin sandstone aquifers, shall have an annual extraction limit of 500 ML/yr.
- (5) Notwithstanding the provisions of subclauses (1), (2), and (4), the Minister may, upon application by an access licence holder, vary the distance restrictions specified in this clause if:
- (a) an hydrogeological study, undertaken by the licence holder, and assessed as adequate by the Minister, demonstrates minimal potential for any adverse impact on existing licensed extraction,
- (b) all potentially affected access licence holders have been notified by the proponent, and

Note—

Potentially affected access licence holders are typically neighbouring access licence holders and/or those in the near vicinity.

- (c) there is a process for remediation in the event that any adverse impact occurs in the future, specified as conditions on the licence.

(6) Subclauses (1) to (3) do not apply to extraction under existing access licences.

Note—

The intention of this clause is to minimise the impact of extraction under new access licences on extraction under existing access licences. It is intended to develop models to support hydrogeological assessment of the adverse impacts of new groundwater extractions on existing licensed extraction.

37 Water level management

- (1) The Minister may declare that, in order to maintain water levels within these groundwater sources, local access rules are to apply in a defined area, known as a local impact area.
- (2) If water levels in any part of a groundwater source have declined to such an extent that an adverse impact is occurring, or is likely to occur, extraction from all water supply works (bores) nominated by an access licence within a local impact area declared under subclause (1) shall be restricted to such an extent and for such time as is required to reinstate water levels to such a degree as to mitigate or avoid that impact.
- (3) An adverse impact in subclause (2) shall be considered to have occurred if the Minister considers that excessive drawdown has occurred, or if:
 - (a) the average of the seasonally recovered water levels over a 5 year period is not maintained within 10% of the total available drawdown below the initial seasonally recovered water level over the 5 year period, or
 - (b) if the seasonally recovered water levels are not maintained within 20% of the total available drawdown below the July 2002 water level.

Note—

This clause recognises that in some locations, at certain periods of high groundwater demand, critical water level declines may occur, and that additional extraction limitations may be required. The Department of Land and Water Conservation will identify monitoring bores, and determine the method for specifying an affected area. The total available drawdown is defined by the height of the piezometric level above the bedrock (i.e. base of the groundwater source). Groundwater levels will be measured in the winter months of June, July or August allowing the aquifer to recover from the previous pumping season.

38 Water quality management

- (1) The beneficial uses of these groundwater sources, based on 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) raw water for drinking purposes, and
 - (b) agricultural water,

Note—

It is not recommended that the water from this groundwater source 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 this groundwater source, local access rules are to apply in a defined area known as a local impact area.
- (4) A baseline of electrical conductivity (hereafter **EC**), against which changes in the salinity of groundwater will be measured, will be set in year 6 of this Plan based on the results of a salinity monitoring program undertaken by the Minister.
- (5) The EC limits adopted by this Plan for the beneficial use categories are as follows:
 - (a) 800 EC for Raw Water for Drinking Supplies Class, and
 - (b) 1,500 EC for Agricultural Water Class.

Note—

These are the limits specified in Guidelines for Groundwater Protection in Australia, Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand, (1995, as adopted by the NSW Government *Groundwater Quality Protection Policy 1997*).

- (6) If, for groundwater of less than or equal to 800 EC, as established by the salinity baseline set by subclause (4), there is an increase in salinity of more than 20% of the difference between the salinity baseline set by subclause (4) and the beneficial use class limits established in subclause (5) (a), then:
 - (a) the Minister may declare a local impact area,
 - (b) access licence holders within the local impact area will need to demonstrate to the Minister that continual extraction, or a proposed new extraction regime, will not have an unacceptable impact on the groundwater quality of the aquifer, and
 - (c) until such time that this justification to continue to extract has been assessed and approved by the Minister:
 - (i) extraction from water supply works nominated by an access licence within the local impact area will be restricted to such an extent and for such time as required to halt that salinity increase, or
 - (ii) access licence holders may be issued with a directive to cease to pump.
- (7) If, for groundwater of greater than 800 EC and less than or equal to 1,500 EC, as

established by the salinity baseline set by subclause (4), there is an increase in salinity of more than 20% of the difference between the salinity baseline set by subclause (4) and the beneficial use class limit established in subclause (5) (b), then:

- (a) the Minister may declare a local impact area,
 - (b) access licence holders within the local impact area will need to demonstrate to the Minister that continual extraction, or a proposed new extraction regime, will not have an unacceptable impact on the groundwater quality of the aquifer, and
 - (c) until such time that this justification to continue to extract has been assessed and approved by the Minister:
 - (i) extraction from water supply works nominated by an access licence within the local impact area shall be restricted to such an extent and for such time as required to halt that salinity increase, or
 - (ii) access licence holders may be issued with a directive to cease to pump.
- (8) If there is an increase in salinity from extraction that results in the current beneficial use class salinity limit being exceeded, then subclauses (7) (a) and 7 (c) shall apply.

39 Protection of groundwater dependent ecosystems

- (1) Extraction of groundwater from a new or replacement water supply work (bore) is excluded:
 - (a) within 100 m of high priority groundwater dependent ecosystems for water supply works (bores) exercising basic rights,
 - (b) within 200 m of high priority groundwater dependent ecosystems for water supply works (bores) nominated by an access licence, and
 - (c) within 40 m of any river for any works.

Note—

Subclause (1) will not apply to extraction from an existing water supply work (bore) until such time as the work is replaced.

- (2) High priority groundwater dependent ecosystems are those listed in Schedule 4.
- (3) Pursuant to section 42 (2) of the Act, the Minister may identify further high priority groundwater dependent ecosystems and include them in Schedule 4 at the end of years 4 and 9, based on further studies of groundwater ecosystem dependency undertaken by the Minister.
- (4) The Minister should consult with the Minister for the Environment before adding further high priority groundwater dependent ecosystems to Schedule 4.

40 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) nominated by an access licence within a local impact area declared under subclause (1), to such an extent and for such time as to stabilise that subsidence or compaction.

41 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 local impact area.

42 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.

43 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

44 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.

45 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 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, or
 - (b) the dealing would result in the total extraction under access licences through nominated works in the area, plus basic landholder rights extraction, causing any adverse local impact in accordance with Part 10 Division 3 of this Plan, or otherwise.

46 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 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, as amended in clause 28.
- (4) Notwithstanding subclause (3), a new licence specifying Zone 3, 4 or 5 may not be issued following cancellation of an access licence in Zone 1, 2, or 6.
- (5) The volume of the share component on an access licence issued under this clause is to be the volume of the cancelled access licence share component.

47 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.

48 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.

49 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 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 remains below the extraction limit of that groundwater source established in clause 27, as amended by clause 28, or

(b) the assignment would not result in the total extraction of credited water allocations through nominated works in the area, plus basic landholder rights extraction, causing any adverse local impact in accordance with Part 10 Division 3 of this Plan, or otherwise.

(3) Notwithstanding subclause (2), water allocations may not be assigned from an access licence in Zone 1,2 or 6, to an access licence in Zone 3, 4 or 5.

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.

50 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

51 Mandatory conditions on access licences

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

52 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 domestic and stock access licences shall have mandatory conditions that only allow the taking of water for the purpose of domestic consumption or stock watering as defined in section 52 of the Act.
- (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.

53 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 devices shall be of a type, and shall be maintained in a manner, which is acceptable to the Minister,
- (j) a water supply work (bore), excluding a water supply work granted for extraction of basic landholder rights, 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, excluding the holder of a water supply work approval for extraction of basic landholder rights, to ascertain from the Minister whether or not there are in place any local impact restrictions before commencing to take water from the groundwater source,
- (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),
- (n) any new applications for water supply works (bore) approvals are to be sent to the NSW Aboriginal Land Council for assessment of potential impacts on sites of significance and for advice on appropriate distance restrictions, and
- (o) 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

54 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

55 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, or
 - (e) clause 39 in respect to high priority groundwater dependent ecosystems.

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 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.

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 that proportion of the long term average annual recharge and storage which can be extracted each year without causing adverse impact on the environment or groundwater users, including landholders exercising basic rights.

Great Artesian Basin is a 'confined' groundwater basin comprised of a complex multi-layered system of water bearing strata (porous sandstone aquifers) separated by largely impervious rock units, underlying largely arid and semi-arid landscapes to the west of the Great Dividing Range, and extending from Queensland through New South Wales and the Northern Territory, to South Australia.

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.

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

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

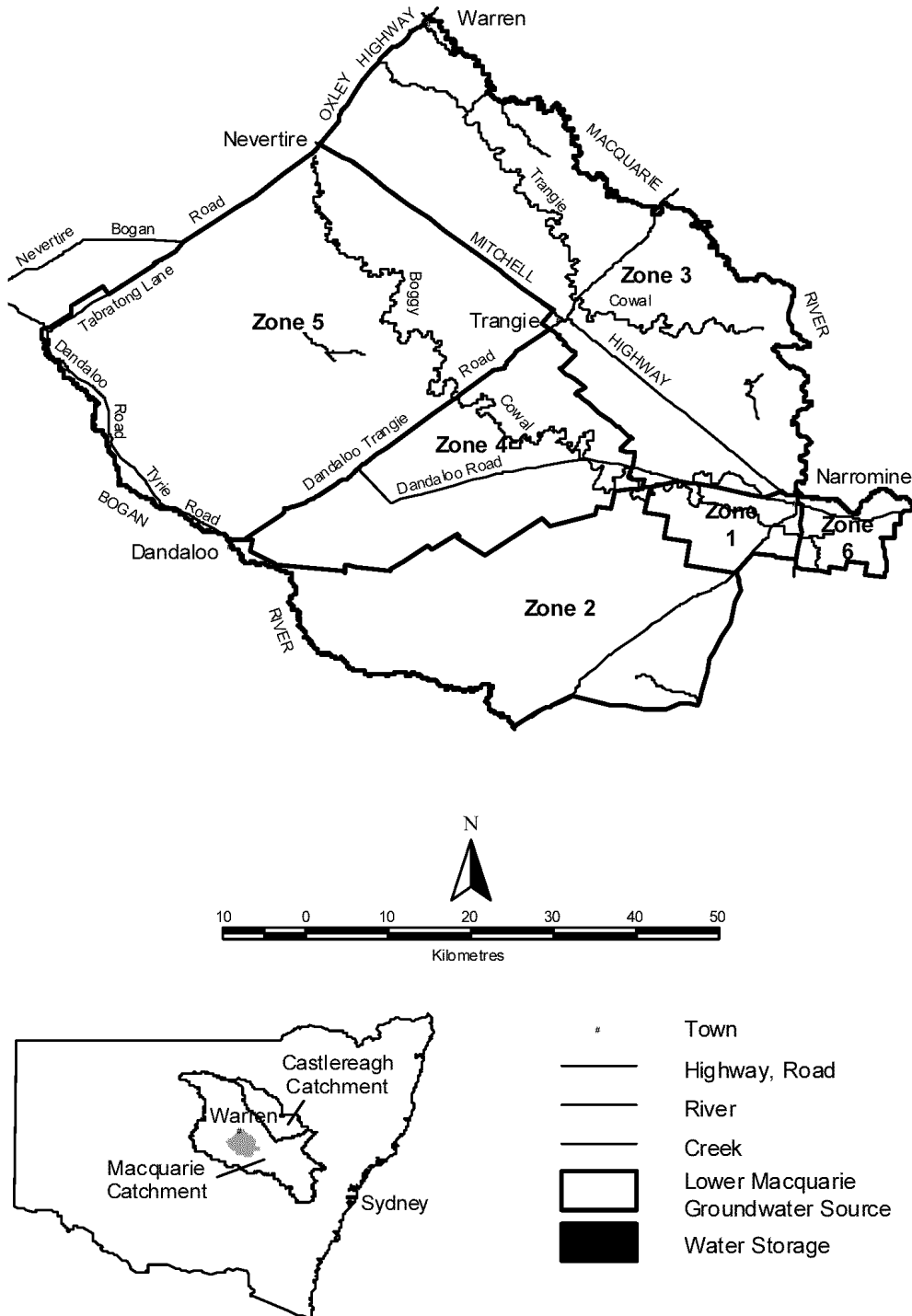
recharge is the addition of water, usually by infiltration, to an aquifer.

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

share component is the share component of an access licence.

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

Schedule 2 Lower Macquarie Groundwater Sources



Schedule 3 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL—contributes to target in full

HIGH—while not fully contributing to target, 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>Target 1e 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>	HIGH	<ul style="list-style-type: none"> • This Plan clearly sets out the extraction limit as 85% of estimated recharge, for each groundwater source. • An expert panel had insufficient information to identify significant groundwater dependent ecosystems. • An expert panel could not identify significant groundwater dependent ecosystems and therefore this Plan has adopted the extraction limit of 85%. • The extraction limit will be reviewed twice in the term of this Plan, however, the review provision limits any adjustment of the extraction limit to a maximum of 70% of recharge.
<p>Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon</p>	FULL	<ul style="list-style-type: none"> • Rules set out in Part 9.

Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes

PARTIAL

- While detailed assessment of environmental requirements was not undertaken, an expert panel could not, on the basis of existing information, identify any specific groundwater dependent ecosystems. River red gums may have some groundwater dependency, and the closer these are to the river channels and cowals, the more likely they are to have a groundwater dependence.
- This Plan sets out the Environmental Health Water as 15% of estimated recharge for each groundwater source.
- This Plan excludes licensed extraction from within 200 metres of wetlands and high priority dependent groundwater ecosystems subsequently identified, and 40 metres of any river.
- This Plan establishes extraction rules/specified drawdown limits to manage groundwater level declines, groundwater quality impacts, and to protect aquifer integrity.
- This Plan provides for review (including more detailed investigation of groundwater dependency) and variation in environmental health water/extraction limit by June 30 2007.
- The review provision limits any upward adjustment of the environmental health water to 30% of recharge.
- This Plan establishes transparent extraction limits and allocation rules.
- Access rights are tradeable under this Plan.
- This Plan embargos new access licence applications.

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

HIGH

- The necessary reduction in entitlement will not be complete until the start of year 10 and may leave rights and the market uncertain until that time.
- The local impact rules mean 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.

<p>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</p>	<p>FULL</p>	<ul style="list-style-type: none"> • The total licence volumes for some of the groundwater sources are greater than 125% of the extraction limit. • This Plan provides for a two-stage reduction in access licence share components to 125% of the extraction limit. • The reduction to 150% of extraction limit will occur after 4 years, and the reduction to 125% will occur at the start of year 10.
<p>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</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • No assessment of connectivity has been undertaken. • This Plan excludes licensed extraction from within 40 metres of any river. • No detailed assessment or mapping of groundwater dependent ecosystems has been undertaken.
<p>Target 11 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>PARTIAL</p>	<ul style="list-style-type: none"> • This Plan excludes licensed extraction from within 200 metres of wetlands and any high priority dependent groundwater ecosystems (although these have not been identified yet). • This Plan provides for review (including more detailed investigation of groundwater dependency) and variation in environmental health water by 30 June 2007.
<p>Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use</p>	<p>FULL</p>	<ul style="list-style-type: none"> • This Plan has identified the volumes necessary to meet basic domestic and stock requirements. • It also protects domestic and stock bores from interference from higher yielding bores.
<p>Target 13 The knowledge sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • All water supply works approvals will be sent to the NSW Aboriginal Lands Council.
<p>Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them</p>	<p>HIGH</p>	<ul style="list-style-type: none"> • This Plan addresses Aboriginal cultural or traditional requirements and it includes an objective to this effect. • A review of such requirements is also in this Plan.

Target 16a All share components of access licences tradeable	FULL	<ul style="list-style-type: none"> This Plan provides for trading of access licence share components and water allocations.
Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water	HIGH	<ul style="list-style-type: none"> This Plan does not allow trading out of these groundwater sources, but does allow trading within the area, subject to rules that provide protection for the environment and existing users.
Target 16d Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery	FULL	<ul style="list-style-type: none"> This Plan does not impose reduction factors.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	FULL	<ul style="list-style-type: none"> This Plan establishes 6 separate groundwater sources and prohibits trading between them based on the extraction levels versus the extraction limit for each zone
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries	HIGH	<ul style="list-style-type: none"> This Plan does include a water quality objective and sets out criteria and management rules for salinity. The beneficial use categories and criteria are in this Plan.
Target 38 Aquifer water quality vulnerability zones mapped and extraction limits reviewed to reduce the risk of lateral intrusion of poor quality water	PARTIAL	<ul style="list-style-type: none"> No vulnerability mapping of area is referenced in this Plan. Rules are contained in this Plan to manage the risk of lateral movement of poor quality groundwater.

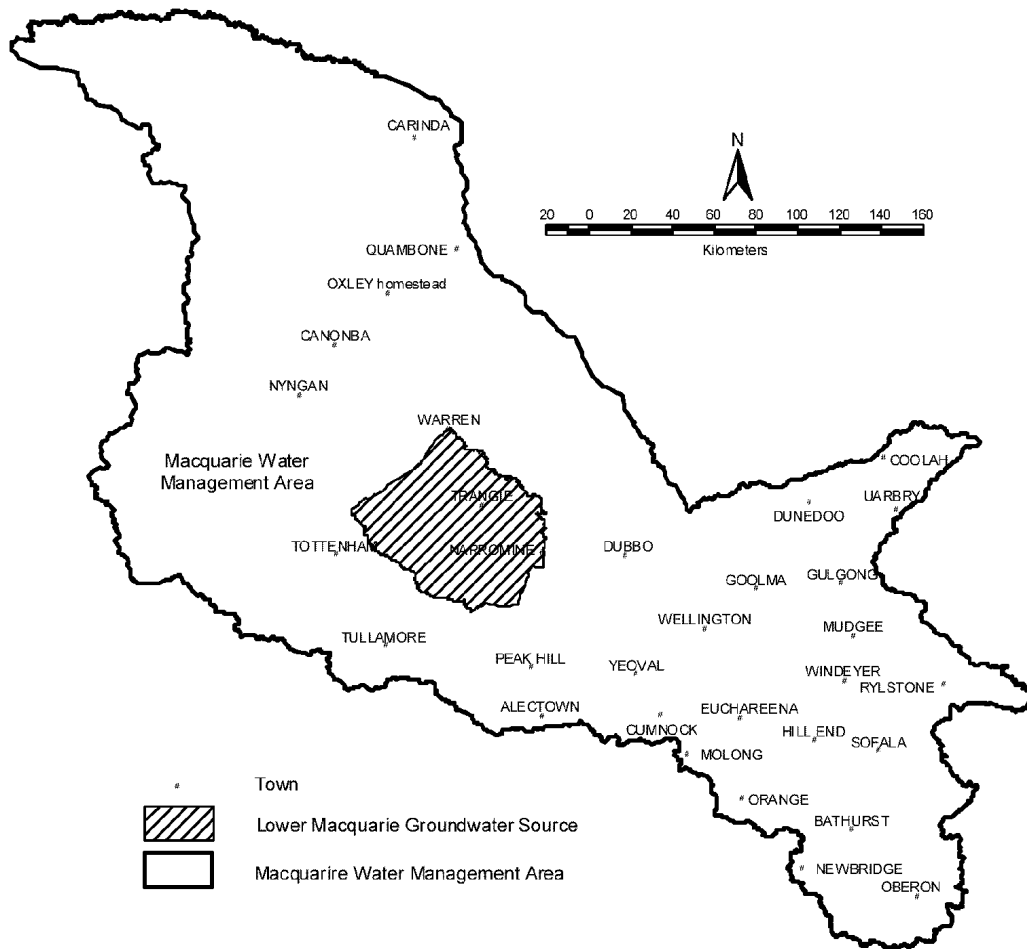
Schedule 4 High priority groundwater dependent ecosystems

There are no high priority groundwater dependent ecosystems identified at the commencement of this Plan.

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 3, should be contacted for a current list.

Appendix 1 Macquarie Water Management Area



Appendix 2 Location of maps

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

District Office
 Department of Land and Water Conservation
 209 Cobra Street
 DUBBO NSW 2830

Regional Office
 Department of Land and Water Conservation
 181 Anson Street
 ORANGE NSW 2800

Appendix 3 Performance indicators

Performance indicators for the Lower Macquarie Groundwater Sources Water Sharing Plan

Performance indicator	Related objective	As measured by	Commentary
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<p>(a) Change in groundwater extraction relative to the extraction limits.</p>	<p>11 (a) 11 (b) 11 (c)</p>	<ul style="list-style-type: none"> • Average annual extraction volume for aquifer/zone as a percentage of the extraction limit (commonly known as the sustainable yield). 	<ul style="list-style-type: none"> • Plan provisions will set the mechanism to remain within the sustainable yield over the long term.
<p>(b) Change in climate adjusted groundwater levels.</p>	<p>11 (a) 11 (b) 11 (c)</p>	<ul style="list-style-type: none"> • Average annual frequency and duration (in days) of water level drawdown below pre-plan baseline. • Density of extraction in critical areas. • Identification of groundwater dependent ecosystems (GDEs). • Assessment of the relationship between selected GDEs and local groundwater levels in terms of the water requirements of these GDEs. 	<ul style="list-style-type: none"> • 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.
<p>(c) Change in water levels adjacent to identified groundwater dependent ecosystems.</p>	<p>11 (a)</p>	<ul style="list-style-type: none"> • Assessment of the adequacy of buffer zones or local impact restrictions by comparison of water levels near in or GDEs compared to plan baseline. • Frequency and duration of water level drawdown below critical levels. • Trends in selected water quality parameters at selected monitoring bores that are likely to be affected by groundwater extraction. 	<ul style="list-style-type: none"> • Groundwater dependent ecosystems will be identified during the the term of the Plan.
<p>(d) Change in groundwater quality.</p>	<p>11 (a)</p>	<ul style="list-style-type: none"> • Trends in selected water quality parameters at selected monitoring bores that are likely to be affected by groundwater extraction. 	<ul style="list-style-type: none"> • Many water quality issues are a function of contamination by land based activities, rather than extraction.

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

- | | | |
|--|------------------|---|
| (i) Extent to which native title rights requirements have been met. | 11 (d) | <ul style="list-style-type: none">• Monitor increase in applications for water supply work (bore) approvals for native title basic rights.• Number of reports of interference between high yield extraction and native title rights holders, or number of bores deepened.• Assess frequency and duration of water level drawdown below critical thresholds. |
| (j) Extent of recognition of spiritual, social and customary values of groundwater to Aboriginal people. | 11 (d)
11 (e) | <ul style="list-style-type: none">• Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people.• The collection of information on the values associated with water is considered the first step in addressing the objects of the Act.• 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. |

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.