

Water Sharing Plan for the Lower Gwydir Groundwater Source 2003

[2003-189]



New South Wales

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New South Wales

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Water Sharing Plan for the Lower Gwydir Groundwater Source 2003



New South Wales

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Lower Gwydir Groundwater Source 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 January 2004, 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 Gwydir and Border Rivers Water Management Areas known as the Lower Gwydir Groundwater Source (hereafter **this groundwater source**) as shown on the map in Schedule 2.

Note—

The Gwydir and Border Rivers Water Management Areas are shown on the map in Appendix 1.

5 Waters to which this plan applies

- (2) The water in this groundwater source includes all water contained in the unconsolidated alluvial sediment aquifers associated with the Gwydir River, its tributaries, and effluents downstream of Gravesend.

Note—

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

listed in Appendix 2.

Note—

Water supply works drilled through the unconsolidated sediments into the underlying Great Artesian Basin (GAB) are tapping a different resource. On plan, they may lie within the boundaries of the Lower Gwydir Groundwater Sources, however they are within the deeper GAB Groundwater Source and are not included as a part of this Plan.

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 an ecologically sustainable groundwater resource that provides an assured supply of good quality groundwater for the social and economic benefit of the people in the Gwydir Catchment.

11 Objectives

The objectives of this Plan are to:

- (a) protect and maintain groundwater dependent ecosystems by minimising the impacts of extraction,
- (b) manage and share the groundwater resources of the Gwydir Valley in a sustainable and equitable manner, while minimising negative local and regional impacts,
- (c) protect the structural integrity of the aquifer by ensuring extraction does not cause any aquifer compaction, aquitard compaction or land subsidence,
- (d) protect and maintain groundwater quality by ensuring extraction does not result in a change in the beneficial use of the aquifer,
- (e) provide opportunities for market based trading of groundwater rights within the extraction limit and interference constraints,
- (f) preserve basic landholder rights to this groundwater source,
- (g) ensure there are no long term declines in water levels by managing allocations and extractions within the extraction limit, and
- (h) protect and maintain cultural and heritage values through the management of this groundwater source.

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 this groundwater source, taking into account the requirements of the environment,
- (d) reduce the total share component of access to 125% of the final extraction limit,
- (e) establish rules for granting of access licences,
- (f) establish rules for determining the groundwater available from time to time under

access licences,

- (g) establish water allocation account management rules,
- (h) establish rules for minimising the local impacts of groundwater extraction on the environment, the aquifer itself, and between users,
- (i) establish the access licence dealing rules, and
- (j) establish the 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 limit,
- (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 the economic benefits derived from groundwater extraction and use,
- (f) change in structural integrity of the aquifer,
- (g) extent to which domestic and stock rights requirements have been met,
- (h) extent to which local water utility requirements have been met,
- (i) extent to which native title rights requirements have been met, and
- (j) extent of recognition of spiritual, social and customary values of groundwater to Aboriginal people.

Note—

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

Part 3 Basis for water sharing

14 Basis for water sharing

This Part is made in order to give effect to section 5 (3) of the Act, and in accordance with sections 20 (2) (c) and 21 (e) of the Act.

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore that the level of natural recharge to this groundwater source will vary.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of water in this groundwater source 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 this groundwater source.

16 Recharge

- (1) The overall basis for water sharing in this Plan is the average annual recharge to this groundwater source, estimated to be 38,000 megalitres per year (hereafter **ML/yr**).
- (2) Pursuant to section 42 (2) of the Act, the average annual recharge established in subclause (1) may be varied by the Minister at 30 June 2007 following further recharge studies undertaken by the Minister.

Note—

The extent of impact of this change on access by licence holders is limited by 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 maintain the cultural and heritage values associated with this groundwater source (see clause 11 (h)).

- (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 this groundwater source, minus the basic landholder rights, minus the supplementary access permitted under clause 25, as varied by clause 29 is reserved for the environment,
 - (b) subject to Part 10 Division 2 of this Plan 15% of the average annual recharge to this groundwater source, being 5,700 ML/yr, is reserved for the environment.

- (2) Pursuant to section 42 (2) of the Act, the Minister may vary the proportion of recharge reserved as the environmental health water in subclause (1) (b) at 30 June 2007, based on further studies of groundwater ecosystem dependency undertaken by the Minister.

Note—

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

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

19 Supplementary environmental water

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

20 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The 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 water supply works (bores) 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 this groundwater source under section 114 of the Act, as a contribution to the costs of activities or works associated with subclause (2).

Note—

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

Note—

A basic landholder right allows an owner or occupier of a landholding to take water from an aquifer underlying the land without the need for an access licence, for domestic consumption, stock watering, and native title purposes only. Those exercising basic rights from a bore must still obtain a water supply works approval for the bore. These approvals are renewable every 20 years. This is to ensure that information about bore location and condition are kept up to date, for the protection of the resource from deteriorating bores, and in the case of a pollution event.

22 Domestic and stock rights

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.

- (1) At the commencement of this Plan the water requirements of holders of domestic and stock rights are estimated to be a total of 700 ML/yr.

Note—

The volumes of water identified in subclause (2) are the total volumes of water estimated for domestic and stock rights in this groundwater source. Refer to Appendix 4 for the calculation of domestic and stock rights.

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

Part 7 Requirements for water for extraction under access licences

25 Estimate of water requirements

- (1) This Part is made in accordance with section 20 (1) (c) of the Act.
- (2) At the commencement of this Plan, the requirements identified for water for extraction under access licences within this groundwater source is estimated to be 70,109 ML/yr.
- (3) Subclause (2) includes local water utility access licences of 3,581 ML/year in this

groundwater source, made up of 3,506 ML/yr for Moree, 73 ML/yr for Pallamallawa, and 2 ML/yr for Ashley.

Note—

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

- (4) Pursuant to section 42 (2) of the Act, at the commencement of Year 1 of this Plan the Minister should reduce the total share components of aquifer access licences in this groundwater source to 125% of the recharge established in clause 16, minus the environmental water established in clause 18, being $1.25 \times (38,000 - 5,700)$, which equals 40,375 ML/yr.
- (5) Local water utility access licences, and access licences with a share component of less than 50 ML/yr will not be subject to any access licence share component reductions made in accordance with subclause (4).
- (6) Access licences of greater than 50 ML/yr will not be reduced below 50 ML/yr as a result of access licence share component reductions made in accordance with subclause (4).
- (7) At the time of commencement of Part 2 of Chapter 3 of the Act, aquifer access licences in this groundwater source with a history of extraction greater than 80% of their access licence share component, as amended by subclause (4), will have a second licence, called a supplementary water access licence.
- (8) The supplementary water access licence referred to in subclause (7), will have an initial share component equivalent to the history of extraction, minus 80% of their aquifer access licence share component, as amended by subclause (4).
- (9) The history of extraction referred to in subclauses (7) and (8) will be for each access licence the greater of:
 - (a) the average metered extraction in the water years 1993/94 to 1997/98, or the average of the years within that period from which extraction was first measured, not exceeding the licence volumes preceding this Plan, or
 - (b) the average metered extraction in the water years 1997/98 to 2001/02, or the average of the years within that period from which extraction was first measured, not exceeding the licence volumes preceding this Plan.
- (10) The metered extraction each year referred to in subclause (9) will include any extraction resulting from carryover or borrowing in those years, but will be adjusted to exclude any transfers to or from access licence equivalents in those years.
- (11) Share components of supplementary water access licences specified in subclause (7) will be reduced to 0 ML/yr at 30 June 2012.

- (12) This Plan recognises that the total requirements for water for extraction under access licences within this groundwater source may change during the term of this Plan as a result of:
- (a) the granting, surrender, cancellation or non-renewal of access licences,
 - (b) the variation of a 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 this groundwater source and the need to protect groundwater dependent ecosystems, aquifer integrity and groundwater quality.
- (2) Access licences may be granted in this groundwater source, 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 this groundwater source, other than access licences of the following kinds:
 - (a) local water utility access licences, and

Note—

Pursuant to sections 66 (3) and 66 (4) of the Act, the Minister may also vary a local water utility's entitlement to water 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 or extraction component sought will be the minimum required to meet that purpose and circumstance.
- (5) Access licences granted under this Part cannot extract water through a water supply work (bore) located in areas where the full extraction authorised by access licences nominating water supply works located in the area, plus 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 the 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 this groundwater source shall have a share component expressed as a volume in megalitres per year (ML/yr).

Part 9 Limit to the availability of water

Division 1 Long-term average extraction limit

27 Long-term average extraction limit

- (1) This Division is made in accordance with section 20 (2) (a) of the Act.
- (2) The long-term average extraction limit for this groundwater source is initially 32,300 ML/yr, plus the total access permitted under supplementary water access licences provided for in clause 25, as varied by clause 29.

28 Variation of the long-term average extraction limit

- (1) Pursuant to section 42 (2) of the Act, the Minister may vary the long-term average extraction limit established under clause 27 at 30 June 2007 as a result of:
 - (a) any change to the average annual recharge arising from clause 16 (2), and
 - (b) any change to the environmental health water arising from clause 18 (2).
- (2) If there is any change to the long-term average extraction limit arising from subclause (1) then:
 - (a) the extraction limit will not be greater than 38,760 ML/yr, plus the total access permitted under supplementary water access licences provided for in clause 25, as varied by clause 29, and

- (b) the extraction limit will not be less than 25,840 ML/yr, plus the total access permitted under supplementary water access licences provided for in clause 25, as varied by clause 29.

Division 2 Available water determinations

29 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:
 - (a) water extraction in this 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 a comparison of the extraction limit against the average extraction within the groundwater source over that year and the preceding 2 years.

Note—

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

- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in the aquifer for environmental purposes, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work (bore),
- (d) total water available under aquifer access licences will be equal to the recharge established in clause 16, minus the proportion of recharge reserved as environmental health water in subclause 18, minus the total water available to local water utility access licences,
- (e) if the 3 year average of extraction in this groundwater source exceeds the long term average extraction limit established in clause 27 by 5% or greater, the available water determination for the following water accounting year for access licences in this groundwater source should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
- (f) if the 3 year average of extraction in this groundwater source is less than 95% of the long-term average extraction limit established in clause 27, then the available water determination for access licences in this groundwater source shall be

increased to such an extent as to allow extraction to increase to the extraction limit,

- (g) notwithstanding subclause (f), an available water determination shall not exceed 100% of total access licence share components to which it applies,
- (h) an available water determination calculated in accordance with subclauses (e) to (g) will be made each water accounting year, will apply to all access licences in the groundwater source, excepting local water utility and supplementary water access licences, and will be the same percentage for all access licence share components to which it applies,
- (i) a separate available water determination will be made in this groundwater source each water year for local water utility access licences, and subject to section 60 of the Act, this shall be 100% of these access licence share components,
- (j) an available water determination of 100% of total supplementary water access licence share components will be made in Years 1 to 3 of this Plan,
- (k) the available water determination for supplementary water access licences will be reduced by 1/7 each year commencing at the start of Year 4 of this Plan, and
- (l) there will be no water made available to supplementary water access licences from the start of Year 10 of this Plan.

Part 10 Rules for managing access licences

Division 1 General

30 Rules for managing access licences

This Part is made in accordance with sections 20 (2) (b) and 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 this groundwater source.

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 this groundwater source will be accounted for at least annually.
- (2) Water taken by an approved water supply work (bore) nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) A water allocation account shall remain at or above zero at all times.
- (5) In any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 3 of this Plan, water taken from this groundwater source under an aquifer access licence may not exceed a volume consisting of:
 - (a) 160% of 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.
- (6) Total water in any account at any time may not exceed a volume consisting of:
 - (a) 240% of aquifer 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.
- (7) A maximum of 160% of any aquifer access licence share component may be carried

forward in a water allocation account from one water accounting year to the next.

- (8) Subclauses (5), (6) and (7) do not apply to local water utility access licences.
- (9) For local water utility access licences in any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 3 of this Plan, water taken from this groundwater source, 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, and
 - (c) minus any water allocations assigned to another licence under section 71G of the Act in that year.
- (10) Allocations in a local water utility water allocation account cannot be carried over from one water accounting year to the next.
- (11) Subclauses (5) to (10) do not apply to supplementary water access licences.
- (12) For supplementary water access licences, in any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 3 of this Plan, water taken from this groundwater source may not exceed the allocation resulting from the supplementary water access licence available water determination for that year.
- (13) Allocations in a supplementary water access licence water allocation account cannot be carried over from one water accounting year to the next.
- (14) Where both an aquifer access licence, and a supplementary water access licence are held, water allocations will be debited from the supplementary water access licence account, before water is debited from the aquifer access licence account.
- (15) Subclauses (5) to (14) do not apply to any access licence specified in Schedule 4 of this Plan.
- (16) Any access licence specified in Schedule 4 will be subject to the water allocation account management rules specified in that Schedule, in addition to clauses 31, 32, 33 and 34 (1) to (4).

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) The minimum allowable distance between a property boundary and extraction from new and replacement water supply works (bores) authorised to extract equal to or greater than 20 ML/yr is 200 metres.
- (2) New and replacement water supply works (bores) authorised to extract less than 20 ML/yr which are within 100 metres of any basic rights water supply work, will require an investigation of potential impacts on neighbouring water supply works (bores).
- (3) The Minister may, upon application by an access licence holder, vary the distance restrictions specified in subclause (1) 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, and adjacent landholders 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.
- (4) Subclause (1) does not apply to extraction under existing access licences until such time as the nominated water supply work (bore) is replaced.

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 this groundwater source, 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, in the opinion of the Minister, an adverse impact is occurring, or is likely to occur, extraction from all water supply works (bores) within a local impact area declared under subclause (1) that are nominated by an access licence will 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.

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, specify the target levels, and determine the method for specifying an affected area.

38 Water quality management

- (1) The beneficial uses of this groundwater source are raw water for drinking, and irrigation, 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*.

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) If unacceptable water quality declines are resulting from extraction, extraction from all water supply works (bores) within a local impact area declared under subclause (3) that are nominated by an access licence will be restricted to such an extent and for such time as required to halt that decline, or restore the beneficial use of this groundwater source.
- (5) Extraction under local water utility access licences shall be subject to restrictions under this Part, but not to such an extent as access is denied.

39 Protection of groundwater dependent ecosystems

- (1) Extraction of groundwater from a new or replacement water supply work (bore) is excluded within 100 metres of high priority groundwater dependent ecosystems, or any creek or river, for those exercising basic landholder rights, and 200 metres for extraction authorised by all other access licences unless the water supply work (bore):
 - (a) only draws water from an aquifer at depths greater than 50 metres, and
 - (b) has an impermeable seal, constructed within the annulus of the water supply work (bore), as specified by the Minister, to isolate aquifers above 50 metres depth, and to prevent water ingress from the shallow aquifers.

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 5.
- (3) Pursuant to section 42 (2) of the Act, the Minister may identify further high priority groundwater dependent ecosystems and include them in Schedule 5 at any time, based on further studies of groundwater ecosystems 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 5.

Note—

At the commencement of this Plan, there is not sufficient information to identify high priority groundwater dependent ecosystems within the Lower Gwydir Groundwater Source.

40 Protection of aquifer integrity

- (1) The Minister may declare that, in order to protect the integrity of the aquifers within this groundwater source, 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.

Note—

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

41 Extraction Restrictions

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

Note—

The Minister will attempt to give licence holders prior notice of any local impact restrictions so as to minimise the impacts of such restrictions on access within a season.

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 5.

- (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 this groundwater source.
- (2) Dealings are prohibited under this clause if:
 - (a) any of the access licences or water allocations involved are not within this groundwater source,
 - (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,
 - (c) the dealing would result in any increase in the total access licence share components nominating works within the Gwydir Watercourse Plan of Management area, as shown in Schedule 2,
 - (d) the dealing would result in any increase in the total water allocations credited to access licences nominating works within the Gwydir Watercourse Plan of Management area, as shown in Schedule 2,
 - (e) the dealing involves a supplementary water access licence, or any water allocation credited to a supplementary water access licence water allocation account,
 - (f) the dealing involves any assignment of access rights from any access licence specified in Schedule 4,
 - (g) the dealing involves any water allocation assignments from any access licence specified in Schedule 4, or
 - (h) the dealing involves any nomination of works by any access licence specified in Schedule 4, other than those nominated by the licence at the commencement of this Plan.

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 this groundwater source.

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 this groundwater source.

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 this groundwater source 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 access licences in other water sources and access licences in this groundwater source are prohibited.

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 this groundwater source 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 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 water allocation account management rules established in this Plan,
 - (f) the requirement that water may only be taken under the access licence by the water supply work (bore) nominated by the access licence,
 - (g) the taking of water in accordance with the access licence may only occur if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account, and
 - (h) any other conditions required to implement the provisions of this Plan.
- (2) All aquifer access licences shall have mandatory conditions to give effect to clause 25, in relation to the amendment of access licence share components.
- (3) All supplementary water access licences shall have mandatory conditions to give effect to clause 25, in relation to the amendment of access licence share components.
- (4) All local water utility access licences shall have mandatory conditions that only allow the taking of water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act.
- (5) Any access licence specified in Schedule 4 will have addition mandatory conditions applied, as specified in that Schedule.

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) must comply with the relevant local impact management rules in Part 10 of this Plan,
- (k) notwithstanding the available water determination, it is the responsibility of the water supply work (bore) approval holder to ascertain from the Minister whether or not there are in place any local impact restrictions before commencing to take water from this 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), and

(n) any other conditions required to implement the provisions of this Plan.

Note—

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

Part 13 Monitoring and reporting

54 Monitoring and reporting of performance indicators

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

Note—

Review and Audit of this Plan

In accordance with section 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, and
- (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.

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

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

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

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.

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

samples for water quality analysis.

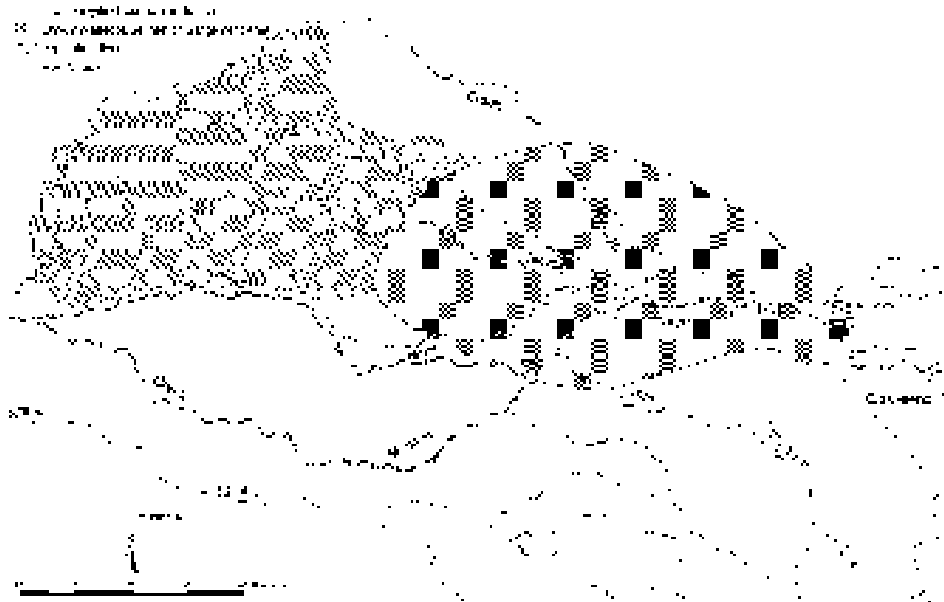
recharge is the addition of water, usually by infiltration, to an aquifer.

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 alluvium/sediment is sediment deposited by the action of flowing water in particular along river beds and floodplains, but not including lakes and seas.

Schedule 2 Lower Gwydir Groundwater Source



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 the target

Relevant target	Level of contribution	Comments
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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

PARTIAL

- This Plan clearly sets out the final extraction limit as 85% of estimated recharge.
- While detailed assessment of groundwater dependent ecosystems was not undertaken, preliminary studies suggest that there may not be significant groundwater dependent ecosystems in this groundwater source.
- This Plan provides for the extraction limit to be reviewed by year 5 and the extraction limit revised by up to 20%.

Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon

FULL

- Rules set out in Part 9.
- While detailed assessment of groundwater dependent ecosystems was not undertaken, preliminary studies suggest that there may not be significant groundwater dependent ecosystems in this area and the Lower Gwydir is a losing river.

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

HIGH

- This Plan prohibits new or replacement extraction bores within 200 metres of any designated high priority dependent groundwater ecosystems and 100 metres for basic rights bores, but these are not likely to be identified before year 5.
- This Plan recognises the Minister's right to take action to prevent local groundwater level declines, groundwater quality impacts, and to protect aquifer integrity.
- This Plan provides for an assessment of groundwater dependency and variation in environmental health water by up to 20% before year 5.

<p>Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components</p>	<p>HIGH</p>	<ul style="list-style-type: none"> • This Plan establishes a transparent extraction limit and water allocation account rules. • This Plan embargos new licence applications. • Access rights are tradeable. • The local extraction rules means that future rights will not be exclusive but affected by the future location of works. Licences with existing bores will have priority over licences requiring new bores.
<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 aquifer access licence share components for this groundwater source will be reduced to 125% of the final extraction limit at the commencement of this Plan.
<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>HIGH</p>	<ul style="list-style-type: none"> • While detailed assessment of connectivity was not undertaken, preliminary information suggests that the aquifer gains water from the Lower Gwydir River and the river is not therefore dependent on any groundwater baseflow. The top end of the Gwydir regulated river around Gravesend is a gaining river but with low dependency on groundwater baseflows. • Groundwater extraction should not have significant impacts on discharges to the river and creeks. • While detailed assessment of groundwater dependent ecosystems was not undertaken, preliminary studies suggest that there may not be significant groundwater dependent ecosystems in this groundwater source.
<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 prohibits new or replacement extraction bores within 200 metres of any designated high priority dependent groundwater ecosystems and 100 metres for basic rights bores, but these are not likely to be identified before year 5. • This Plan provides for an assessment of groundwater dependency and variation in environmental health water by up to 20% before year 5.

<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>	HIGH	<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>	PARTIAL	<ul style="list-style-type: none"> • 1 Aboriginal community representative has been involved in development of this Plan. • No Aboriginal cultural or traditional sites or requirements have been identified. • This Plan includes a general objective for protection of cultural values. • This Plan prohibits new or replacement extraction bores within 200 metres of any designated high priority dependent groundwater ecosystems and 100 metres for basic rights bores, but these are not likely to be identified before year 5.
<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>	PARTIAL	<ul style="list-style-type: none"> • Aquifer access licence share components and water allocations are tradeable.
<p>Target 16a All share components of access licences tradeable</p>	HIGH	<ul style="list-style-type: none"> • This Plan does not establish zones but does restrict transfers into the areas covered by the Gwydir Watercourse Plan of Management.
<p>Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit</p>	FULL	<ul style="list-style-type: none"> • This Plan includes a general water quality objective. • This Plan establishes rules to protect water quality. • This Plan is explicit about the beneficial uses and criteria.
<p>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</p>	HIGH	<ul style="list-style-type: none"> • No vulnerability mapping of area is referenced. • This Plan provides rules for managing lateral movement of poor quality water.
<p>Target 38 Aquifer water quality vulnerability zones mapped and extraction limits reviewed to reduce the risk of lateral intrusion of poor quality water</p>	PARTIAL	<ul style="list-style-type: none"> • No vulnerability mapping of area is referenced. • This Plan provides rules for managing lateral movement of poor quality water.

Schedule 4 Special access licence rules and conditions

1 General

- (1) This Schedule applies to bore licence numbers 90BL017406, 90BL031080, 90BL031082, 90BL031083, 90BL031085, 90BL031089, 90BL031092, 90BL031093, 90BL031096, 90BL031097, 90BL031098, 90BL031099, 90BL031104, 90BL031106, 90BL031107, 90BL031109, 90BL031110, 90BL031112, 90BL132841, 90BL132843, 90BL132846, 90BL247831, 90BL247832, 90BL247833, 90BL247834, 90BL247835, 90BL247836, 90BL247837, 90BL247838, 90BL247839, 90BL247840, 90BL247841, 90BL247842, 90BL247843, 90BL247844, 90BL247845, 90BL247846, 90BL247847, 90BL247848, 90BL247849, 90BL247850, 90BL247941, 90BL247942, 90BL247943, 90BL247944, 90BL247945, 90BL247946, 90BL247949, 90BL247950, 90BL247951, 90BL247952 and 90BL247953 granted under the [Water Act 1912](#), being associated with property account number 90PT981567, and any aquifer access licence arising from these at the commencement of Part 2 of Chapter 3 of the Act.
- (2) If any access licence specified in subclause (1) is subject to a dealing under sections 71D, 71E, 71F, 71J, or 71G of the Act, and that dealing results in the assignment of access rights or water allocations to or from the licence specified in subclause (1), or the nomination of a water supply work at a location other than that specified on the licence, then Schedule 4 will be removed from this Plan, and any special mandatory conditions attached to the access licence arising from this Schedule removed from the licence.

2 Additional annual accounting for water extraction rules

- (1) In any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 3 of this Plan, water taken from this groundwater source under any aquifer access licence may not exceed a volume of 750% of the access licence share component, as amended by clause 25.
- (2) Total water in any account at any time may not exceed a volume of 750% of the aquifer access licence share component, as amended by clause 25.
- (3) A maximum of 670% of any aquifer access licence share component may be carried forward in a water allocation account from one water accounting year to the next.

3 Additional mandatory conditions

The aquifer access licence on this schedule shall have mandatory conditions in relation to the following:

- (a) water may only be taken if the available water determination for regulated river (high security) access licences in the Gwydir Regulated River water source is less than 100%,

- (b) water may only be taken if there is no allocation remaining in the water allocation account of licence number SA001044 granted under the [Water Act 1912](#), and any regulated river (high security) access licence arising from this at the commencement of Part 2 of Chapter 3 of the Act,
- (c) water may not be taken in any water year that the licence specified in subclause (3) (b) has been or is subject to a dealing under sections 71D, 71E, 71F, 71J, or 71G of the Act, and that dealing results in the assignment of access rights or water allocations from the licence specified in subclause (3) (b), or the nomination of a water supply work at a location other than that specified on the licence, and
- (d) notwithstanding clause 2 of this Schedule, the total water that may be taken in a water accounting year under this access licence, and the regulated river (high security) access licence specified in subclause (3) (b), shall not exceed 13,275 megalitres, plus any water allocations assigned to these access licences in that year.

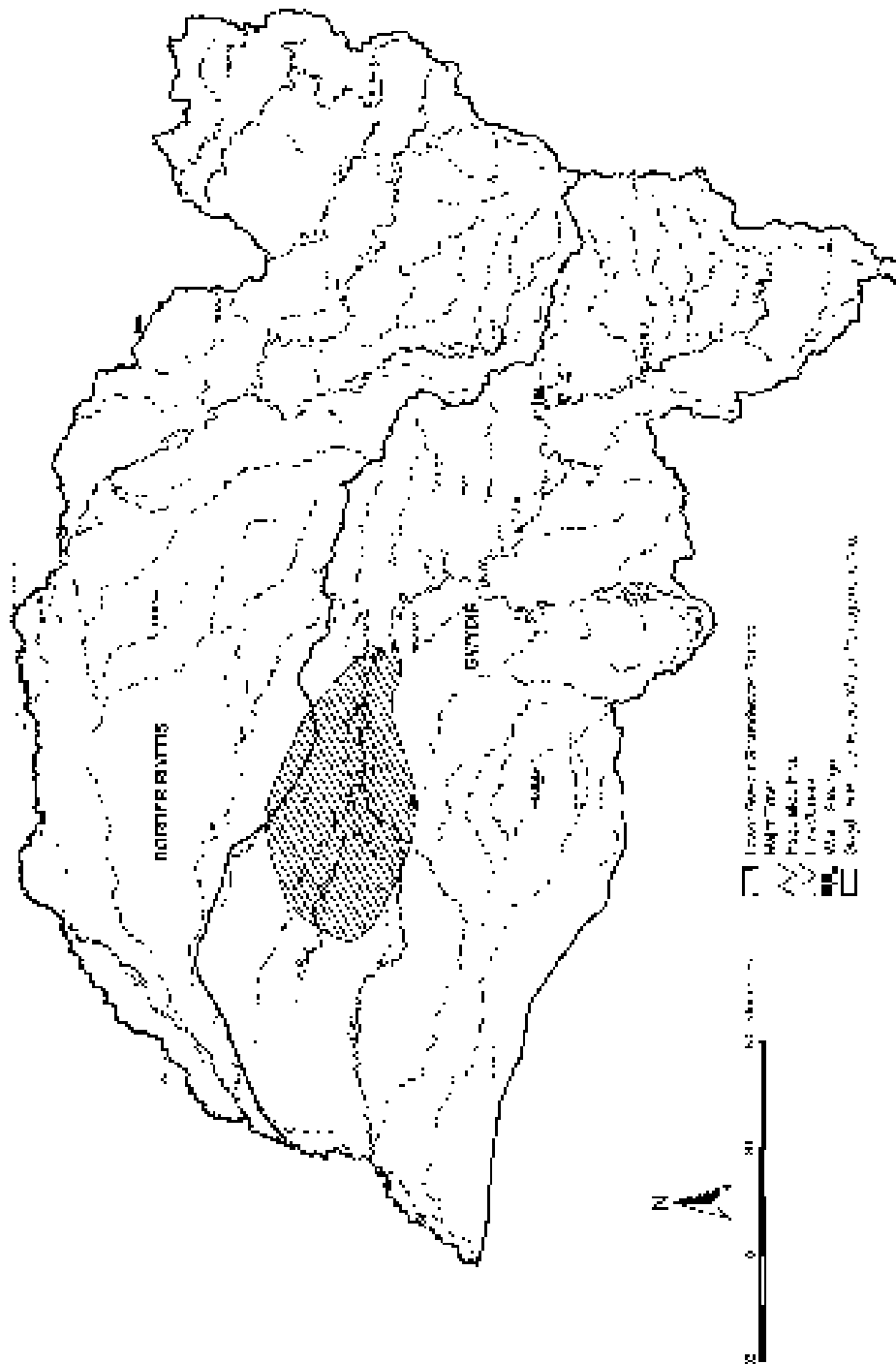
Schedule 5 High priority groundwater dependant ecosystems

To be inserted by the Minister in accordance with clause 39 (3).

Note—

The offices of the Department of Land and Water Conservation, shown in Appendix 2, should be contacted for details applicable to this Schedule.

Appendix 1 Gwydir and Border Rivers Water Management Areas



Appendix 2 Location of maps

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

District Office
Department of Land and Water Conservation

66-68 Frome Street
 MOREE NSW 2400

Regional Office
 Department of Land and Water Conservation
 155-157 Marius Street
 TAMWORTH NSW 2340

Appendix 3 Performance indicators

Performance indicators for the Lower Gwydir Groundwater Source Water Sharing Plan

Performance indicator	Related objective	As measured by	Commentary
(a) Change in groundwater extraction relative to the extraction limit.	11 (a), (b), (c), (d), (f), and (g).	<ul style="list-style-type: none"> Average annual extraction volume for the groundwater 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.
(b) Change in climate adjusted groundwater levels.	11 (a), (b), (c), (d), (f), and (g).	<ul style="list-style-type: none"> Average annual frequency and duration (in days) of water level drawdown below pre-plan hydrographs. Density of extraction in critical areas. 	<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.
(c) Change in water levels adjacent to identified groundwater dependent ecosystems.	11 (a) and (g).	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> Groundwater dependent ecosystems should be identified in the water sharing plans.

(d) Change in groundwater quality.	11 (b), (d), (f), and (h).	<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.
(e) Change in economic benefits derived from groundwater extraction and use.	11 (b), (e), and (h).	<ul style="list-style-type: none"> • Change in regional gross margins. • Change in unit price of water transferred. 	<ul style="list-style-type: none"> • Note that there are many factors affecting economic status of a region, for example commodity prices, other sources of water (i.e. surface water) etc. • Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of the plan's provisions.
(f) Change in structural integrity of the aquifer.	11 (b) and (c).	<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. 	
(g) Extent to which domestic and stock rights requirements have been met.	11 (j) and (g).	<ul style="list-style-type: none"> • Number of reports of interference between high yield extraction and basic rights, or number of domestic and stock water supply works 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.
(h) Extent to which local water utility requirements have been met.	11 (b), (e), (f), (g), and (h).	<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. 	

- | | | |
|--|---|---|
| <p>(i) Extent to which native title rights requirements have been met.</p> | <p>11 (f), (g), and (h).</p> | <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 water supply works deepened. • Assess frequency and duration of water level drawdown below critical thresholds. |
| <p>(j) Extent of recognition of spiritual, social, and customary values of groundwater to Aboriginal people.</p> | <p>11 (a), (b), (c), (d), (f), (g) and (h).</p> | <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 water source, as a minimum requirement. |

Appendix 4 Calculation of domestic and stock rights

Requirements for Lower Gwydir Groundwater Source

A component of the Lower Gwydir Groundwater Source Water Sharing Plan is the provision of basic landholder rights to groundwater for domestic and stock purposes.

The domestic and stock requirements for the Lower Gwydir Groundwater Source was calculated for water supply works identified within the Lower Gwydir Groundwater Source. These domestic and stock water supply works are those that are not within the boundaries of a property with a groundwater access licence, and do not form part of a local water utility access licence.

It is difficult to measure extraction from these water supply works as their use is not metered. The domestic and stock requirements in this Plan of 694 ML/yr is likely to be an overestimate, the Gwydir Groundwater Management Committee agreed that this figure be included in this Plan and understood the process used in estimating this figure.

The following assumptions were made to calculate the requirements for basic rights domestic and stock extraction:

- each property has an equivalent domestic use irrelevant of the size of the property,
- drinking, cooking, bathing, washing of clothes and cars and other domestic purposes is 0.064 ML/yr per person,

- the average house hold has 4 residents,
- average garden usage is 2 ML/yr,
- stock use is assumed to be the Dry Sheep Equivalent, and the average consumption per head per day is 6 litres (*Management options during a drought*, NSW Agriculture, 1986),
- at a carrying capacity of 4 head/hectare, and
- there may be other sources of water including water from creeks/rivers, dams and tanks.

Calculations

Domestic—A per property usage

$$4 \times 0.064 = 0.256 \text{ ML/yr}$$

$$\text{Garden} = 2.000 \text{ ML/yr}$$

$$\text{Total Domestic Use} = 2.250 \text{ ML/yr}$$

Stock

$$6\text{L/d} \times 365 \text{ days} \times 4 \text{ (sheep/ha)} / 1,000,000\text{L} = 0.0088 \text{ ML/yr/ha}$$

Total Domestic and Stock Requirements

214 properties, with a total area of 26,484 hectares were identified in the Lower Gwydir Groundwater Source as having domestic and stock water supply work(s). The total domestic and stock demand is therefore 694 ML/yr, with 482 ML/yr and 212 ML/yr for domestic use and stock use respectively.

Future Development

Based on historical development of stock and domestic water supply works in the Lower Gwydir Groundwater Source it is estimated that there will be a growth rate of 21% over the period of the water sharing plan, an additional 42 domestic and stock water supply works to access basic landholder rights.

It is assumed that all new domestic and stock water supply works will be drilled and constructed on separate properties. The existing data indicates that the average size of these properties would be 81.5 hectares. The total additional stock and domestic requirements for the period of this Plan will be 125 ML/yr. This is 94.5 ML/yr and 30.5 ML/yr for domestic use and stock use respectively.

Appendix 5 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.