

# Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2003 (2002 SI 1035)

[2002-1035]



New South Wales

## Status Information

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### Provisions in force

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### Authorisation

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# Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2003 (2002 SI 1035)



New South Wales

## Contents

<b>Part 1 Introduction</b>	6
1 Name of Plan	6
2 Nature and status of this Plan	6
3 Date of commencement	6
4 Area and waters to which this Plan applies	6
5 Interpretation	7
6 Inspection of detail maps	8
7 Effect on licences, authorities and permits under the Water Act 1912	8
8 State Water Management Outcomes Plan	8
<b>Part 2 Vision, objectives, strategies and performance indicators</b>	8
9 Vision, objectives, strategies and performance indicators	8
10 Vision	8
11 Objectives	9
12 Strategies	9
13 Performance indicators	10
<b>Part 3 Basis for water sharing</b>	10
14 Basis for water sharing	10
15 Climatic variability	11
16 Recharge	11

<b>Part 4 Environmental water provisions</b>	12
17 Environmental water provisions	12
18 Environmental health water	12
19 Supplementary environmental water	13
20 Adaptive environmental water	13
<b>Part 5 Basic landholder rights</b>	13
21 Basic landholder rights	13
22 Domestic and stock rights	14
23 Native title rights	14
<b>Part 6 Bulk access regime</b>	15
24 Bulk access regime	15
<b>Part 7 Requirements for water for extraction under access licences</b>	15
25 Estimate of water requirements	15
<b>Part 8 Rules for granting access licences</b>	19
26 Rules for granting access licences	19
<b>Part 9 Limits to the availability of water</b>	21
<b>Division 1 Extraction limits</b>	21
27 Extraction limits	21
28 Variation of the extraction limit	22
<b>Division 2 Available water determinations</b>	24
29 Available water determinations	24
<b>Part 10 Rules for managing access licences</b>	26
<b>Division</b>	26
30 Rules for managing access licences	26
<b>Division 1 Water allocation account management</b>	26
31 Water allocation account management	26
32 Water allocation accounts	26

33	Accrual of water allocations.....	26
34	Annual accounting for water extraction.....	26
	<b>Division 2 Management of local impact .....</b>	<b>28</b>
35	Management of local impact .....	28
36	Extraction interference between neighbouring bores.....	28
37	Water level management .....	29
38	Water quality management .....	30
39	Protection of groundwater dependent ecosystems .....	30
40	Protection of aquifer integrity .....	31
41	Extraction restrictions .....	31
42	Group registration .....	31
43	Infrastructure failure.....	32
	<b>Part 11 Access licence dealing rules .....</b>	<b>32</b>
44	Access licence dealing rules .....	32
45	Rules relating to constraints within a groundwater source .....	33
46	Rules for change of water source .....	33
47	Rules for conversion of access licence category.....	34
48	Rules for interstate access licence transfer .....	34
49	Rules for water allocation assignments between water sources .....	34
50	Rules for interstate assignment of water allocations .....	35
	<b>Part 12 Mandatory conditions .....</b>	<b>35</b>
51	Mandatory conditions on access licences .....	35
52	Access licences.....	35
53	Mandatory conditions on water supply work (bore) approvals .....	36
	<b>Part 13 Monitoring and reporting.....</b>	<b>37</b>
54	Monitoring .....	37
	<b>Part 14 Amendment of this Plan .....</b>	<b>38</b>
55	Amendment of this Plan .....	38
	<b>Dictionary .....</b>	<b>38</b>

**Schedule 2 Upper and Lower Namoi Groundwater Sources.....40**

**Schedule 3 Contribution to targets in the State Water Management Outcomes Plan**  
..... 40

**Schedule 4 High priority groundwater dependent ecosystems.....44**

**Appendix 1 Namoi and Gwydir Water Management Areas .....45**

**Appendix 2 Location of maps .....45**

**Appendix 3 Performance indicators .....46**

**Appendix 4 Minister’s access licence dealing principles.....49**

# Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2003 (2002 SI 1035)



New South Wales

## Part 1 Introduction

### 1 Name of Plan

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

### 2 Nature and status of this Plan

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

### 3 Date of commencement

This Plan takes effect on 1 July 2005, and ceases 10 years after that date.

### 4 Area and waters to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Namoi and Gwydir Water Management Areas known as the Upper and Lower Namoi Groundwater Sources (hereafter **these groundwater sources**) as shown in Schedule 2.

#### Note—

The Namoi and Gwydir Water Management Areas, published in the NSW Government Gazette in November 2001, are shown on the map in Appendix 1.

- (2) The following groundwater sources referred to in this Plan are shown on the map in Schedule 2:
  - (a) Upper Namoi Zone 1, Borambil Creek Groundwater Source (hereafter **Zone 1**),

- (b) Upper Namoi Zone 2, Cox's Creek (Mullaley to Boggabri) Groundwater Source (hereafter **Zone 2**),
- (c) Upper Namoi Zone 3, Mooki Valley (Breeza to Gunnedah) Groundwater Source (hereafter **Zone 3**),
- (d) Upper Namoi Zone 4, Namoi Valley (Keepit Dam to Gin's Leap) Groundwater Source (hereafter **Zone 4**),
- (e) Upper Namoi Zone 5, Namoi Valley (Gin's Leap to Narrabri) Groundwater Source (hereafter **Zone 5**),
- (f) Upper Namoi Zone 6, Tributaries of the Liverpool Range (South to Pine Ridge Road) Groundwater Source (hereafter **Zone 6**),
- (g) Upper Namoi Zone 7, Yarraman Creek, (East of Lake Goran to Mooki River) Groundwater Source (hereafter **Zone 7**),
- (h) Upper Namoi Zone 8, Mooki Valley (Quirindi—Pine Ridge Road to Breeza) Groundwater Source (hereafter **Zone 8**),
- (i) Upper Namoi Zone 9, Cox's Creek (up-stream Mullaley) Groundwater Source (hereafter **Zone 9**),
- (j) Upper Namoi Zone 10, Warrah Creek Groundwater Source (hereafter **Zone 10**),
- (k) Upper Namoi Zone 11, Maules Creek Groundwater Source (hereafter **Zone 11**),
- (l) Upper Namoi Zone 12, Kelvin Valley Groundwater Source (hereafter **Zone 12**), and
- (m) Lower Namoi Groundwater Source (hereafter **the Lower Namoi**).

**Note—**

This Plan does not recognise separate groundwater sources within the Lower Namoi valley.

- (3) The Upper and Lower Namoi Groundwater Sources include all water contained in the unconsolidated alluvial sediment aquifers associated with the Namoi River and its tributaries.

**Note—**

Bores drilled through the unconsolidated alluvial sediments into the underlying Great Artesian Basin (GAB) are tapping a different groundwater source. On a map, they may appear to lie within the boundaries of the Lower Namoi, however they are within the deeper GAB groundwater source and are not included as a part of this Plan.

## 5 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.

## **6 Inspection of detail maps**

Maps referred to in this Plan may be inspected at the locations listed in Appendix 2.

## **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) This Plan is consistent with the State Water Management Outcomes Plan (hereafter ***SWMOP***) in accordance with section 16 (1) (a) of the Act.
- (2) Schedule 3 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

### **Note—**

The SWMOP applying at the commencement of this Plan is that gazetted on 20 December 2002 under section 6 of the Act.

## **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 ecologically sustainable groundwater sources that provide an assured supply of quality groundwater for the social and economic benefit of the people in the Namoi Valley.

## **11 Objectives**

The objectives of this Plan are to:

- (a) protect, maintain and, where practicable, enhance ecosystems dependent on groundwater, and the cultural and spiritual values of groundwater, by minimising the impacts on these of groundwater extraction,
- (b) protect the structural integrity of the aquifers and groundwater quality, by ensuring groundwater extraction does not result in any aquifer compaction, aquitard compaction, land subsidence or change in the beneficial use of the aquifer,
- (c) manage access to the extraction limits to ensure there are no long-term declines in water levels,
- (d) preserve basic landholder rights access to these groundwater sources and ensure the fair, equitable and reliable access to groundwater through the management of local impacts or interference effects,
- (e) contribute to the protection, maintenance and enhancement of the economic viability of groundwater users and their communities in the Namoi Valley,
- (f) ensure opportunities for market based trading of groundwater access licence rights within sustainability and interference constraints, and
- (g) ensure sufficient flexibility in account management to encourage efficient use of these groundwater sources and to manage these groundwater sources to account for climatic variations.

## **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 extraction limits for each groundwater source, taking into account the requirements of the environment,
- (d) reduce the share component of all access licences to 100% of the final extraction limit in each groundwater source, except in Zones 1 and 5, where the share component of the access licences is to be reduced to 125% of the final extraction limit for those groundwater sources,
- (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 local impact of groundwater extraction on the environment, the aquifers themselves, and between users,
- (i) establish the access licence dealing rules, and
- (j) establish the conditions that will apply to all access licences and water supply work (bore) approvals.

### **13 Performance indicators**

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

- (a) change in groundwater extraction relative to the extraction limits,
- (b) change in climate adjusted groundwater levels,
- (c) change in water levels adjacent to identified groundwater dependent ecosystems,
- (d) change in groundwater quality,
- (e) change in economic benefits derived from groundwater extraction and use,
- (f) change in structural integrity of the aquifers,
- (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 recharge to these groundwater sources will vary.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
  - (a) the sharing of water in these groundwater sources within the limits of water availability on a long-term average basis, and
  - (b) water extraction to enable the protection of groundwater dependent ecosystems, aquifer integrity and water quality of these groundwater sources.

## **16 Recharge**

- (1) For the purposes of section 5 (3) of the Act, the overall basis for water sharing in this Plan is the estimated average annual recharge to each groundwater source as follows:
  - (a) 2,100 megalitres per year (hereafter **ML/yr**) in Zone 1,
  - (b) 7,200 ML/yr in Zone 2,
  - (c) 17,300 ML/yr in Zone 3,
  - (d) 25,700 ML/yr in Zone 4,
  - (e) 16,000 ML/yr in Zone 5,
  - (f) 14,000 ML/yr in Zone 6,
  - (g) 3,700 ML/yr in Zone 7,
  - (h) 16,000 ML/yr in Zone 8,
  - (i) 11,400 ML/yr in Zone 9,
  - (j) 4,500 ML/yr in Zone 10,
  - (k) 2,200 ML/yr in Zone 11,
  - (l) 2,000 ML/yr in Zone 12, and
  - (m) 86,000 ML/yr in the Lower Namoi.
- (2) Pursuant to section 42 (2) of the Act, the Minister may vary the average annual recharge values established in subclause (1), excluding the average annual recharge in Zone 1 established in subclause (1) (a), after 30 June 2007, following further recharge studies undertaken by the Minister.
- (3) Pursuant to section 42 (2) of the Act, the Minister may vary the average annual recharge value established for Zone 1 in subclause (1) (a) after 30 June 2005,

following further recharge studies undertaken by the Minister.

**Note—**

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

**Note—**

Priority will be given to recharge reviews for groundwater sources that do not currently have a numerical model. These are Zones 1, 2, 4, 5, 11, and 12. A priority for review and update of existing models if new information becomes available should be given to Zones 3 and 8.

## **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 impact provisions in Part 10 of this Plan will also protect the cultural and spiritual values of groundwater (see clause 11 (a)).

(1) This Plan establishes the following environmental health water rules:

- (a) the long-term average storage component of the groundwater contained in the aquifers of Zones 1 to 12, minus basic rights extraction, minus the supplementary access permitted under clause 25, as varied by clause 29 will be reserved for the environment,
- (b) the long-term average storage component of the groundwater contained in the aquifers of the Lower Namoi Groundwater Source, minus basic rights extraction, minus the supplementary access permitted under clause 25, as varied by clause 29, will be reserved for the environment.

**Note—**

The model calculation for the long-term average storage component and the recharge in clause 16 (m) has accounted a 7.1 gigalitres per year out flow from the Lower Namoi Groundwater Source.

(2) Pursuant to section 42 (2) of the Act, the Minister may include a proportion of recharge as environmental health water in subclause (1) after 30 June 2007, based on further studies of groundwater ecosystem dependency, and the Aboriginal cultural values associated with groundwater dependent ecosystems, undertaken by the Minister.

**Note—**

The studies may recommend management options other than reservation of a proportion of recharge to

protect groundwater dependent ecosystems.

**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 environmental health water under 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 of their supply by extraction authorised by access licences:
  - (a) the landholder's affected water supply work (bore) may be replaced or deepened to ensure continuing access to water for basic landholder rights, or
  - (b) basic rights water may be supplied by alternative means during critical times.
- (3) The Minister may impose a charge on access licence holders in these groundwater sources under section 114 of the Act, as a contribution to the costs of activities or works associated with subclause (2).

**Note—**

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

basic landholder rights.

## **22 Domestic and stock rights**

### **Note—**

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

(1) At the commencement of this Plan the water requirements of holders of domestic and stock rights in these groundwater sources are estimated to be as follows:

- (a) 39 ML/yr in Zone 1,
- (b) 359 ML/yr in Zone 2,
- (c) 470 ML/yr in Zone 3,
- (d) 667 ML/yr in Zone 4,
- (e) 262 ML/yr in Zone 5,
- (f) 274 ML/yr in Zone 6,
- (g) 89 ML/yr in Zone 7,
- (h) 166 ML/yr in Zone 8,
- (i) 187 ML/yr in Zone 9,
- (j) 36 ML/yr in Zone 10,
- (k) 210 ML/yr in Zone 11,
- (l) 73 ML/yr in Zone 12, and
- (m) 3,304 ML/yr in the Lower Namoi.

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

### **Note—**

Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings overlying these groundwater sources, or as a result of the increase in the exercise of basic landholder rights by existing landholders.

## **23 Native title rights**

(1) At the commencement of this Plan there are no holders of native title rights and therefore the water requirements for native title rights are estimated to be 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—**

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

## **Part 7 Requirements for water for extraction under access licences**

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

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

- (2) At the commencement of this Plan, the requirements identified for water for extraction under access licences within these groundwater sources are estimated to be as follows:
- (a) 8,510 ML/yr in Zone 1,
  - (b) 23,801 ML/yr in Zone 2,
  - (c) 56,017 ML/yr in Zone 3,
  - (d) 82,590 ML/yr in Zone 4,
  - (e) 36,042 ML/yr in Zone 5,
  - (f) 11,448 ML/yr in Zone 6,
  - (g) 6,321 ML/yr in Zone 7,
  - (h) 48,204 ML/yr in Zone 8,
  - (i) 11,342 ML/yr in Zone 9,
  - (j) 1,420 ML/yr in Zone 10,
  - (k) 8,740 ML/yr in Zone 11,
  - (l) 7,487 ML/yr in Zone 12, and
  - (m) 172,187 ML/yr in the Lower Namoi.
- (3) Subclause (2) includes local water utility access licences of 11,194 ML/yr in these groundwater sources, made up of:
- (a) 1,716 ML/yr in Zone 1, being 1,650 ML/yr for Quirindi and 66 ML/yr for Willow Tree,
  - (b) 59 ML/yr in zone 2, being for Mullaley,
  - (c) 199 ML/yr in zone 3, being for Curlewis,
  - (d) 4,660 ML/yr in zone 4, being 3 900 ML/yr for Gunnedah and 760 ML/yr for Boggabri,
  - (e) 56 ML/yr in zone 8, being for Carroona,
  - (f) 97 ML/yr in zone 9, being 42 ML/yr for Tambar Springs and 55 ML/yr for Premer, and
  - (g) 4,407 ML/yr in the Lower Namoi, being 3,500 ML/yr for Narrabri, 900 ML/yr for Wee Waa, and 7 ML/yr for Rowena.

**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, in Year 1 of this Plan the Minister should reduce the total share components of aquifer access licences in each groundwater source, except Zones 1 and 5, to 100% of the recharge specified in clause 16, by applying the following formula to each aquifer access licence in each groundwater source:

$$\text{Amended access licence share component} = \text{access licence share component prior to amendment} \times \left[ \frac{\text{Recharge} - \text{LWU}}{\text{total access licence share components prior to amendment} - \text{LWU}} \right]$$

- (5) Recharge in subclause (4) is the recharge established for each groundwater source in clause 16 (1).
- (6) LWU in subclause (4) is the total of local water utility access licence share components in each groundwater source, specified in subclause (3).
- (7) Pursuant to section 42 (2) of the Act, in Year 1 of this Plan the Minister should reduce the total share components of aquifer access licences in Zones 1 and 5 to 125% of the recharge established in clause 16, by applying the following formula to each aquifer access licence in each groundwater source:

$$\text{Amended access licence share component} = \text{access licence share component prior to amendment} \times \left[ \frac{(1.25 \times \text{Recharge}) - \text{LWU}}{\text{total access licence share components prior to amendment} - \text{LWU}} \right]$$

**Note—**

Zones 1 and 5 have total amended access licence share components set at 125% of the recharge, due to the level of uncertainty surrounding the recharge estimates. In Zone 1, the large portion of inactive local water utility access licence volume is likely to offset this lesser access licence share component reduction.

**Note—**

Reductions in this clause equate to the following approximate reductions of access licence volumes:

- (a) 87% in Zone 1,
  - (b) 70% in Zone 2,
  - (c) 69% in Zone 3,
  - (d) 73% in Zone 4,
  - (e) 45% in Zone 5,
  - (f) 0% in Zone 6,
  - (g) 41% in Zone 7,
  - (h) 67% in Zone 8,
  - (i) 0% in Zone 9,
  - (j) 0% in Zone 10,
  - (k) 75% in Zone 11
  - (l) 73% in Zone 12, and
  - (m) 51% in the Lower Namoi.
- (8) Subclauses (4) and (7) do not apply to the share components of local water utility access licences.
- (9) At the time of commencement of Part 2 of Chapter 3 of the Act, aquifer access licences in these groundwater sources with a history of extraction greater than either the amended access licence share component, as defined in subclause (4), or 80% of the amended access licence share component defined in subclause (7), if in Zones 1 or 5, will be issued with a supplementary water access licence.
- (10) The initial share component of each supplementary water access licence in subclause (9) will be equivalent to the history of extraction under the access licence, minus the amended access licence share component, as defined in subclauses (4), or 80% of the amended access licence share component defined in subclause (7), if in Zones 1 or 5.
- (11) The history of extraction referred to in subclause (10), for access licences in these groundwater sources, except Zones 7, 11, and 12, will be the greater of:
- (a) the average metered extraction in the water years 1992/93 to 1996/97, not exceeding the allocation announced by the Department of Land and Water Conservation in 2001/02, or
  - (b) the average metered extraction in the water years 1991/92 to 2000/01, not exceeding licence volumes prior to amendment under subclause (4) or (7).
- (12) The history of extraction referred to in subclause (10), for Zones 7, 11, and 12, will

be the greatest of:

- (a) the average metered extraction in the water years 1992/93 to 1996/97, not exceeding the licence volumes at the commencement of this Plan,
- (b) the average metered extraction in the water years 1991/92 to 2000/01, not exceeding licence volumes at the commencement of this Plan, or
- (c) the average metered extraction in the water years 1996/97 to 2000/01, not exceeding licence volumes prior to amendment under subclause (4).

**Note—**

In Zones 7, 11 and 12 the Department of Land and Water Conservation has at the commencement of this Plan announced 100% of licence volumes annually.

- (13) The metered extraction each year referred to in subclauses (11) and (12) will:
  - (a) include any extraction resulting from carryover or borrowing in those years,
  - (b) be adjusted to exclude any transfers to or from access licence equivalents in those years, and
  - (c) be adjusted for extraction under previous conjunctive use licences.
- (14) Share components of supplementary water access licences specified in subclauses (9) and (10) will have their access licence share component reduced to 0 ML/yr at June 30 2012.
- (15) This Plan recognises that the total requirements for water for extraction under access licences within these groundwater sources may change during the term of this Plan as a result of:
  - (a) the granting, surrender, non-renewal or cancellation of access licences,
  - (b) the variation of local water utility access licences under section 66 of the Act,
  - (c) the operation of this Part, or
  - (d) the volumetric quantification of the share entitlement of existing access licences that are currently non-volumetric.

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

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

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act, having regard to the limits to water availability in these groundwater sources and the need to protect groundwater dependent ecosystems and groundwater quality.

- (2) Access licences may be granted in these groundwater sources subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in these groundwater sources, other than access licences of the following kinds:
  - (a) local water utility access licences, or

**Note—**

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

- (b) an access licence resulting from an application of a type listed in section 82 (1) of the Act.

**Note—**

The previous embargo under the [Water Act 1912](#) that prohibited the construction of additional bores under an existing access licence no longer applies.

**Note—**

If necessary, at the commencement of this Plan, the embargo on new entitlements in place under the [Water Act 1912](#) will continue to be in force. The Minister intends to make an embargo under Chapter 3 Part 2 Division 7 of the [Water Management Act 2000](#) when the relevant provisions of the Act are commenced.

- (4) Notwithstanding subclause (3), if for any reason, additional aquifer access licences are granted, other than those specified in subclause (3), and after aquifer access licence share components have been amended in accordance with clause 25:
  - (a) any such additional share components will be granted to those aquifer access licences subject to share component amendment under clause 25,
  - (b) such distribution of share components will be on an equal proportional basis, and
  - (c) any additional share component plus existing share component will not exceed the share component existing immediately prior to an amendment under clause 25.
- (5) In applying for a new access licence, the applicant must establish the purpose and circumstances relating to that access licence, and that the share and extraction component sought will be the minimum required to meet that purpose and circumstance.
- (6) Access licences granted under this Part cannot be used to extract water through a water supply work (bore) located in areas where the extraction authorised by the access licence plus the full extraction authorised by existing access licences nominating water supply works (bores) located in the area and the exercise of basic

landholder rights, are likely to cause an adverse local impact, as outlined in Part 10 Division 2 of this Plan.

- (7) If an access licence share component applied for is significant, as determined by the Minister on the basis of particular aquifer characteristics, the application will not be granted until a water supply work (bore) approval has been granted and the work constructed.
- (8) 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.
- (9) The share component of the access licence granted under subclause (8) will be the proportion of the share component sought that the water supply work (bore) is capable of extracting without adverse local impact, as outlined in Part 10 Division 2 of this Plan, not exceeding the share component sought.
- (10) Subclauses (5) to (9) do not apply to a new access licence arising from an application of a type listed in section 82 (1) of the Act, or to an access licence granted in accordance with subclause (4).
- (11) In accordance with section 56 of the Act, all access licences in these groundwater sources shall have a share component expressed as a volume in megalitres per year.

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

### **Division 1 Extraction limits**

#### **27 Extraction limits**

- (1) This Division is made in accordance with sections 20 (2) (a) of the Act.
- (2) The extraction limit for each groundwater source each year of this Plan is the recharge established in clause 16, plus the total supplementary access provided for in clause 25, as varied by clause 29, minus the proportion of recharge reserved as environmental health water in clause 18, and are initially as follows:
  - (a) 2,100 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 1,
  - (b) 7,200 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 2,
  - (c) 17,300 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 3,
  - (d) 25,700 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 4,

- (e) 16,000 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 5,
- (f) 14,000 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 6,
- (g) 3,700 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 7,
- (h) 16,000 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 8,
- (i) 11,400 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 9,
- (j) 4,500 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 10,
- (k) 2,200 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 11,
- (l) 2,000 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in Zone 12, and
- (m) 86,000 ML/yr plus the total supplementary access provided for in clause 25, as varied by clause 29 in the Lower Namoi.

## **28 Variation of the extraction limit**

- (1) Pursuant to section 42 (2) of the Act, the Minister may vary the extraction limits established under clause 27 after 30 June 2007 as a result of:
  - (a) any change to the average annual recharge arising from clauses 16 (2) and 16 (3), and
  - (b) any change to the environmental health water arising from clause 18 (2).
- (2) If there is any change to the extraction limits arising from subclause (1) then:
  - (a) the extraction limit in Zone 1 will not be greater than 2,625 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 1,575 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29,
  - (b) the extraction limit in Zone 2 will not be greater than 9,000 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 5,400 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29,

- (c) the extraction limit in Zone 3 will not be greater than 21,625 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 12,975 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29,
- (d) the extraction limit in Zone 4 will not be greater than 32,125 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 19,275 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29,
- (e) the extraction limit in Zone 5 will not be greater than 20,000 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 12,000 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29,
- (f) the extraction limit in Zone 6 will not be greater than 17,500 ML/yr, and will not be less than 10,500 ML/yr,
- (g) the extraction limit in Zone 7 will not be greater than 4,625 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 2,775 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29,
- (h) the extraction limit in Zone 8 will not be greater than 20,000 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 12,000 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29,
- (i) the extraction limit in Zone 9 will not be greater than 14,250 ML/yr, and will not be less than 8,550 ML/yr,
- (j) the extraction limit in Zone 10 will not be greater than 5,625 ML/yr, and will not be less than 3,375 ML/yr,
- (k) the extraction limit in Zone 11 will not be greater than 2,750 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 1,650 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29,
- (l) the extraction limit in Zone 12 will not be greater than 2,500 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 1,500 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and
- (m) the extraction limit in the Lower Namoi will not be greater than 107,500 ML/yr, plus the total supplementary access provided for in clause 25, as varied by clause 29, and will not be less than 64,500 ML/yr, plus the total supplementary access

provided for in clause 25, as varied by clause 29.

## **Division 2 Available water determinations**

### **29 Available water determinations**

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:
  - (a) water extraction in each groundwater source will be monitored each water accounting year to determine if any growth in volumes extracted is occurring above the extraction limit in clause 27, based on comparison of the extraction limit against the average extraction within the groundwater source over that year and the preceding 2 years,

**Note—**

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

- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water to be left in the aquifer for environmental purposes, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) if water that, pursuant to an access licence, is committed as adaptive environmental water to be extracted for environmental purposes, then for the purpose of subclause (a), the extraction will be that measured through the approved water supply work (bore),
- (d) an available water determination will be made in each groundwater source each water accounting year for local water utility and domestic and stock access licences, and subject to section 60 of the Act, this shall be 100% of the total access licence share components of those licences,
- (e) an available water determination will be made in each groundwater source each water accounting year for aquifer access licences,
- (f) total water made available to aquifer access licences in each groundwater source will be equal to the recharge established in clause 16, minus the proportion of recharge reserved for the environment in subclause 18, minus the total water made available to local water utility and domestic and stock access licences, except in Zone 1,
- (g) total water available under aquifer access licences in Zone 1 will be equal to the recharge established in clause 16, minus the proportion of recharge reserved for the environment in subclause 18, minus the total water available to local water utility and domestic and stock access licences, plus any under use of Quirindi and

Willow Tree local water utility access licences,

- (h) if the 3 year average of extraction in a groundwater source exceeds the extraction limit established in clause 27 by 5% or greater, the available water determination for that groundwater source for the following water accounting year for aquifer access licences should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the extraction limit,
- (i) if the 3 year average of extraction in a groundwater source is less than 95% of the extraction limit established in clause 27, then the available water determination for that groundwater source for aquifer access licences for the following water accounting year should be increased to such an extent as to allow extraction to increase to the extraction limit,
- (j) the available water determination for aquifer access licences will be expressed as a percentage of the aquifer access licence share component as amended by clauses 25 (4) and 25 (7), will apply to all aquifer access licences in each groundwater source, and will be the same percentage for all access licences to which it applies,
- (k) available water determinations for all aquifer access licences, excluding aquifer access licences in Zone 1, will not exceed 100% of the aquifer access licence share component,
- (l) available water determinations for all aquifer access licences in Zone 1 will not exceed 155% of the aquifer access licence share component,
- (m) an available water determination of 90% of supplementary water access licence share components in Zones 2, 3, 4, 8, and the Lower Namoi will be made in Year 1 of this Plan,
- (n) the available water determination for supplementary water access licences in Zones 2, 3, 4, and 8, and in the Lower Namoi will be reduced by a further 10% each year, with the final reduction at 1 July 2012,
- (o) an available water determination of 100% of supplementary water access licence share components will be made in Year 1 of this Plan for all groundwater sources except Zones 2, 3, 4, 8, and the Lower Namoi,
- (p) the available water determination for supplementary water access licences in Zones 5, 11, and 12 will be reduced by 1/6 each year commencing at the start of Year 5 of this Plan, with the final reduction at 1 July 2012,
- (q) the available water determination for supplementary water access licences in Zone 1 will be reduced by 1/8 each year commencing at the start of Year 3 of this Plan, with the final reduction at 1 July 2012,
- (r) the available water determination for supplementary water access licences in

Zone 7 will be reduced by 1/3 each year commencing at the start of Year 8 of this Plan, with the final reduction at 1 July 2012, and

- (s) there will be no water made available under supplementary water access licences in Year 10 of this Plan.

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

### **30 Rules for managing access licences**

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

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

## **Division 1 Water allocation account management**

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

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

### **32 Water allocation accounts**

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

**Note—**

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

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

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

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

- (1) Water taken from these groundwater sources will be accounted for at least annually.
- (2) Water extracted by a water supply work (bore) nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.
- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) In any one water accounting year, subject to local impact management restrictions

arising from Part 10, Division 2 of this Plan, water taken from these groundwater sources under an aquifer access licence may not exceed a volume consisting of:

- (a) 200% of the aquifer access licence share component as varied by clause 25 (4) or 25 (7),
  - (b) plus any water allocations assigned from another access licence under section 71G of the Act in that year, and
  - (c) minus any water allocations assigned to another access licence under section 71G of the Act in that year.
- (5) Total water in any aquifer access licence water allocation account at any time may not exceed a volume consisting of:
- (a) 300% of the aquifer access licence share component as amended by clause 25 (4) or 25 (7),
  - (b) plus any water allocations assigned from another licence under section 71G of the Act in that year,
  - (c) minus any water allocations assigned to another licence under section 71G of the Act in that year.
- (6) A maximum of 200% of any aquifer access licence share component may be carried forward in a water allocation account from one water allocation accounting year to the next.
- (7) Subclauses (4), (5) and (6) do not apply to domestic and stock and local water utility access licences.
- (8) In any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 2 of this Plan, water taken from these groundwater sources under a local water utility access licence or a domestic and stock access licence, and total water in any water allocation account at any time associated with such an access licence, may not exceed a volume consisting of:
- (a) 100% of the share component of the access licence,
  - (b) plus any water allocations assigned from another access licence under section 71G of the Act in that year,
  - (c) plus any water allocations re-credited in accordance with section 76 of the Act in that year, and
  - (d) minus any water allocations assigned to another licence under section 71G of the Act in that year.
- (9) Allocations in a local water utility or domestic and stock water allocation account

cannot be carried over from one water accounting year to the next.

- (10) Subclauses (4) to (8) do not apply to supplementary water access licences.
- (11) For supplementary water access licences, in any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 2 of this Plan, water taken from any of these groundwater sources may not exceed the allocation resulting from supplementary water available water determination.
- (12) Allocations in a supplementary water access licence water allocation account cannot be carried over from one water accounting year to the next.
- (13) Where both an aquifer access licence and a supplementary water access licence are held, water allocations will be debited from a supplementary water access licence water allocation account before water is debited from an aquifer access licence water allocation account.
- (14) A water allocation account shall remain at or above zero at all times.

## **Division 2 Management of local impact**

### **35 Management of local impact**

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

### **36 Extraction interference between neighbouring bores**

- (1) With the exception of a water supply work (bore) for the supply of basic landholder rights only, applications for a new water supply work (bore) within 100 metres of any bores for the supply of basic landholder rights, will require an investigation by the proponent of the potential impact on neighbouring bores.
- (2) A new water supply work (bore) to exercise basic landholder rights will be required to be drilled to sufficient depth to maintain long-term access to the water source.
- (3) A minimum distance of 400 metres is to be maintained between all new and replacement water supply works (bores), except those for the supply of basic landholder rights only.
- (4) A new or replacement water supply work (bore) shall be located no closer than 200 metres from a property boundary.
- (5) Notwithstanding the provisions of subclauses (1) to (3), the Minister may, upon application by an access licence holder, vary the distance restrictions specified in subclauses (1) to (3) if:
  - (a) a hydrogeological study undertaken by the licence holder, assessed as adequate by the Minister, demonstrates minimal potential for adverse impact on existing

licensed extraction, including consideration of cumulative impact,

- (b) written consent is obtained by the applicant from adjacent landowners, and
- (c) there is a process for remediation in the event that an adverse impact occurs in the future, specified as conditions on the licence.

**Note—**

The onus will be on the applicant to negotiate with neighbouring licence and approval holders, to specify the process for managing pumping, to monitor impact, and to provide plans to mitigate potential impact, and a process for remediation in the event unacceptable impact are reported in the future.

- (6) In the event that there is a dispute between neighbours as to whether the new licensee has had an impact on overall water security, the Minister reserves the right to impose, or amend licence conditions on any or all parties, and the Minister may impose additional requirements such as constructing an additional monitoring bore on the property boundary in order to establish conditions that limit the level of drawdown off-site.
- (7) A new or replacement water supply work (bore), with the exception of a water supply work (bore) for the supply of basic landholder rights only, cannot be constructed within a minimum distance of:
  - (a) 500 metres of a bore nominated by a local water utility access licence,
  - (b) 400 metres of a Department of Land and Water Conservation monitoring bore,
  - (c) 400 metres of a bore extracting from the Great Artesian Basin,
  - (d) 500 metres of a wetland, or
  - (e) 200 metres of a river.

**Note—**

These are standard conditions and situations may occur due to the isotropic and heterogeneous conditions of aquifers where interference occurs. In these situations the Minister may place further conditions on a water supply work (bore) location.

### **37 Water level management**

- (1) The Minister may declare that, in order to protect water levels within these groundwater sources, local access restrictions are to apply in a defined area known as a local impact area.
- (2) If water levels in any part of these groundwater sources have declined to such an extent that adverse impact is occurring, or is likely to occur, extraction from all water supply works (bores) nominated by access licences within a local impact area declared under subclause (1) 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 provision 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.

### **38 Water quality management**

(1) The beneficial uses of these groundwater sources are:

- (a) raw water for drinking, and
- (b) agriculture use,

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*.

(2) Pursuant to subclause (1), water quality decline will be deemed unacceptable if extraction is likely to cause water quality to decline to a lower beneficial use class.

**Note—**

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

- (3) The Minister may declare that, in order to protect water quality within these groundwater sources, local access rules are to apply in a defined area, known as a local impact area.
- (4) If water quality declines are resulting from extraction, extraction from all water supply works (bores) within a local impact area declared under subclause (3) from which access is authorised 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 these groundwater sources.

### **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, or where impact may occur on Aboriginal cultural heritage values 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 as approved by the Minister, and
  - (b) has an impermeable seal, as specified by the Minister, constructed within the bore to isolate aquifers preventing water ingress from the restricted aquifer.

**Note—**

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

- (2) High priority groundwater dependent ecosystems are listed in Schedule 4.
- (3) Pursuant to section 42 (2) of the Act, the Minister may identify further high priority groundwater dependent ecosystems and include them in Schedule 4 after 30 June 2007, 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 4.

**40 Protection of aquifer integrity**

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

**41 Extraction restrictions**

- (1) The Minister may, in the event of local impact restrictions arising from this Division, impose by Order, a reduction in annual, quarterly, monthly, weekly or daily extraction rates from water supply works (bores) nominated by access licences in the affected area.
- (2) Before making an Order under subclause (1) the Minister should consult with representatives of the affected access licence holders.

**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 1 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 licence holder,
- (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 licence holder, 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) (e) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71L of the Act.

**Note—**

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

- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

**Note—**

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

**Note—**

Where there is an inconsistency between access licence dealing rules established in this Plan and the 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 71G of the Act with respect to water allocation assignments within a groundwater source.
- (2) Dealings are prohibited under this clause if:
  - (a) any of the access licences or water allocations involved are not within these groundwater sources,
  - (b) the dealing results in the total access licence share components or credited water allocations authorised to be extracted through nominated works at a location exceeding 600 ML/yr per square kilometre,
  - (c) the dealing would result in the total extraction under access licences through nominated works in the area, plus basic landholder rights extraction, causing an adverse local impact in accordance with Part 10 Division 2 of this Plan,
  - (d) the dealing is a water allocation assignment from the Quirindi local water utility access licence, or
  - (e) the dealing involves a supplementary water access licence, or any water allocation credited to a supplementary water access licence.

**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 affected, 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) An access licence with a share component specifying one of these groundwater sources may be cancelled and a new licence issued under this dealing only if:
  - (a) the access licence cancelled is an aquifer access licence within one of the Upper Namoi Groundwater Sources,
  - (b) the access licence issued is within Zone 10, and
  - (c) the total share components of all access licences in Zone 10 remains below 70% of the recharge established in clause 16 for that Zone.

- (3) The volume of the share component on an access licence issued under a dealing provided for in subclause (2) is to be the volume of the cancelled access licence share component.

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

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

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

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

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

- (1) This clause relates to dealings under section 71G of the Act for assignment of water allocations between water sources.
- (2) Dealings that assign water allocations between access licences in different water sources are prohibited unless provided for in this clause.
- (3) Dealings that assign water allocations between an access licence in one of these groundwater sources and an access licence in another of these groundwater sources are permitted only if:
  - (a) the access licence from which the water allocation is assigned is an aquifer access licence within one of the Upper Namoi Groundwater Sources,
  - (b) the access licence to which the water allocation is assigned is within Zone 10,
  - (c) the total water allocations credited to all access licences in Zone 10 remains below 70% of the recharge established in clause 16 for that Zone, and
  - (d) the assignment would not result in the total extraction of credited water allocations through nominated works in the area, plus basic landholder rights extraction, causing adverse local impact in accordance with Part 10 Division 2 of this Plan.

#### **Note—**

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

## **50 Rules for interstate assignment of water allocations**

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

## **Part 12 Mandatory conditions**

### **51 Mandatory conditions on access licences**

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

### **52 Access licences**

- (1) All access licences shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
  - (a) the specification of share components of the licences,
  - (b) the specification of extraction components of the licences,
  - (c) the requirement that all extraction under access licences will be subject to the available water determinations,
  - (d) the requirement that all extraction under access licences will be subject to any local impact management restrictions established in this Plan,
  - (e) the requirement that all extraction under access licences will be subject to the account management rules established in this Plan,
  - (f) the taking of water in accordance with the access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account, and
  - (g) 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 domestic and stock access licences shall have mandatory conditions that only allow the taking of water for the purpose of domestic consumption or stock watering as defined in section 52 of the Act.
- (5) All local water utility access licences shall have mandatory conditions that only allow the taking of water for the exercise of a water supply function of the local water utility

or for other such purpose provided for under the Act.

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

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

- (a) the water supply work (bore) is only to be constructed by a driller licensed under section 349 of the Act,
- (b) the water supply work (bore) must comply with drilling standards as specified by the Minister,
- (c) construction of a water supply work (bore) must prevent contamination between aquifers through proper bore construction,
- (d) a water supply work (bore) approval holder must ensure decommissioning procedures comply with applicable standards as specified by the Minister,
- (e) a new or replacement water supply work (bore) to access water for basic rights will be required, as a condition of approval, to be constructed to sufficient depth to maintain access to the water source for the life of the work,
- (f) the water supply work (bore) approval holder is, within 2 months of completion, 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 these groundwater sources,
- (l) extraction under an access licence through the approved water supply work (bore) is only authorised with respect to the access licences specified on the water supply work (bore) approval,
- (m) a water supply work (bore) approval holder must supply to the Minister on request, and to the required standards, a report pertaining to the quality of the water obtained from the water supply work (bore), and
- (n) any other conditions required to implement the provisions of this Plan.

**Note—**

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

## **Part 13 Monitoring and reporting**

### **54 Monitoring**

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

**Note—**

Review & 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 the 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 extraction limits, or
  - (e) clause 39 in respect to high priority groundwater dependent ecosystems.

## Dictionary

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

**abandoned** 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.

**aquitards** are geologic units that are of low permeability. Aquitards usually form a layer in a geologic sequence. They may contain water, but would not yield reasonable volumes of water to bores or wells. An example of an aquitard would be a saturated clay layer that is overlying a saturated sandy aquifer.

**aquitard compaction** refers to the reduction in the porosity (pore spaces) of an aquitard.

**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.

**compaction** see [aquifer compaction](#).

**component** see [share component](#).

**drawdown** refers to a lowering of the piezometric surface. 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 water that can be extracted in each water accounting year of this Plan., subject to water allocation account management rules.

**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 determined by groundwater.

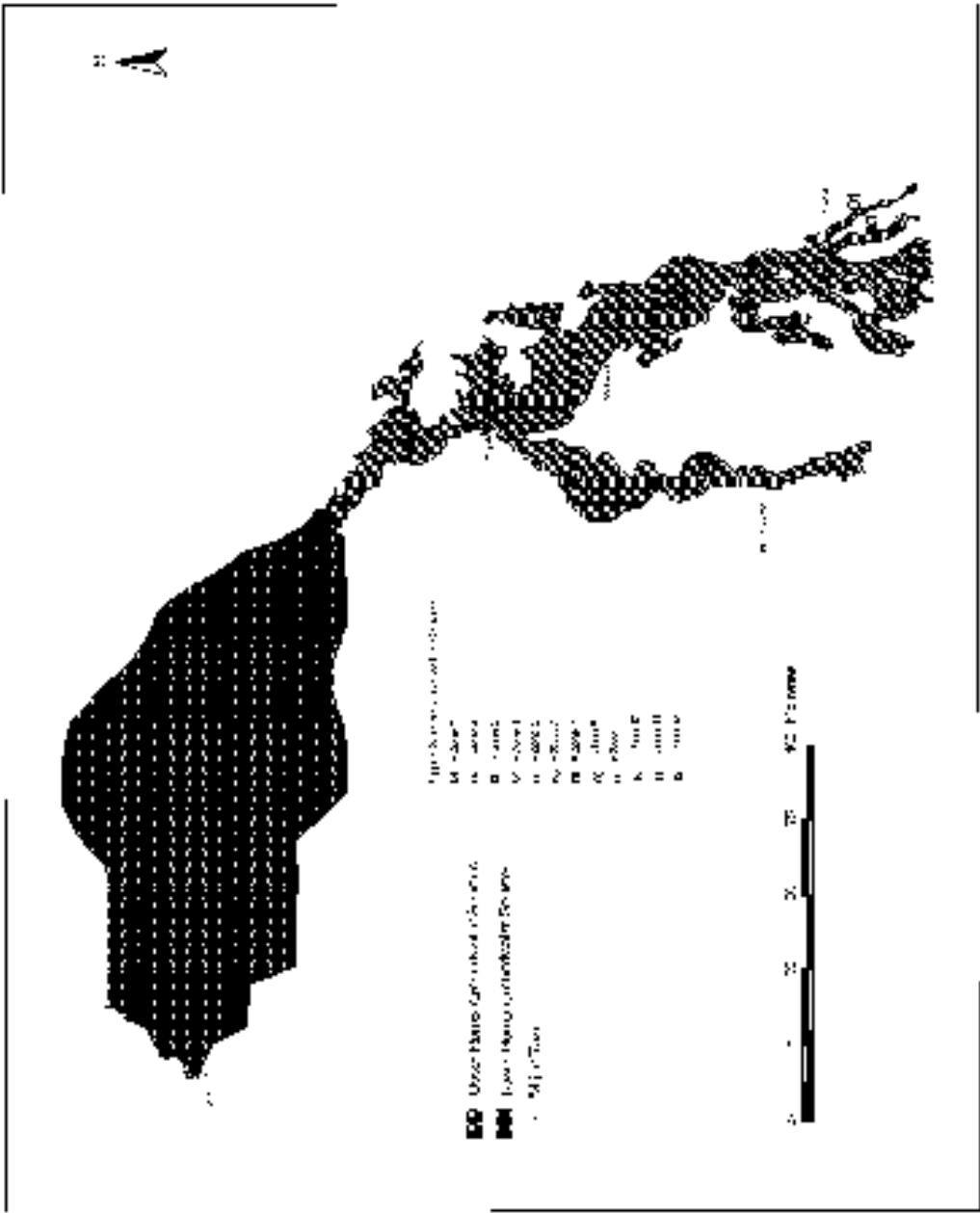
**monitoring bore** refers to a bore constructed for the purpose of measuring water levels and/or taking samples for water quality analysis.

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

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

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

Schedule 2 Upper and Lower Namoi Groundwater Sources



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

Levels of assessed contribution:

- FULL—contributes to target in full
- HIGH—while not fully contributing to target is a good level of contribution
- PARTIAL—goes some way to the target

LOW—only small degree of contribution

Relevant target	Level of contribution	Comments
<p><b>Target 1e</b> The long term average annual extractions for groundwater limited (or being phased down) to an ecologically sustainable level (the Sustainable Yield) as determined by detailed assessment of each groundwater source and consultation with the relevant management committee. In the absence of such an assessment, the following to apply: 100 percent of average annual recharge for a groundwater source where there is no significant ecosystem dependency; 70 percent of average annual recharge where there is significant ecosystem dependency</p>	PARTIAL	<ul style="list-style-type: none"> <li>• This Plan sets out the Sustainable Yield as 100% of estimated recharge which is also distributed by each water source</li> <li>• Detailed assessment of groundwater dependent ecosystems and their environmental requirements has not been undertaken, however there is a review of groundwater dependent ecosystem requirements and this Plan can be amended in Year 5 to take account of the results of this</li> </ul>
<p><b>Target 1f</b> Rules for adjustments to future water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant water management committee, and acted upon</p>	FULL	<ul style="list-style-type: none"> <li>• Rules set out in Part 9 of this Plan</li> <li>• Detailed assessment of groundwater dependent ecosystems and their environmental requirements has not been undertaken</li> </ul>
<p><b>Target 2</b> All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes</p>	PARTIAL	<ul style="list-style-type: none"> <li>• This Plan excludes licensed extraction from within 200 metres of high priority groundwater dependent ecosystems which may be identified during the term of this Plan, creeks and rivers (or 100m for basic rights)</li> <li>• This Plan sets out local extraction rules to prevent the localised decline in water levels</li> <li>• However the water account rules in Part 10 of this Plan allow a high level of extraction to occur and may place the resource and any dependent ecosystems at risk</li> <li>• This Plan allows for a review of groundwater dependent ecosystems by Year 6</li> </ul>

<p><b>Target 5</b> Access rights for water access licensees clearly and legally specified in terms of share and extraction components</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> <li>• This Plan establishes transparent Sustainable Yields and allocation rules</li> <li>• Access licence share components are tradeable under this Plan</li> <li>• This Plan recommends embargos on new licence application</li> <li>• The reduction in access licence share components are made explicit in this Plan</li> <li>• The water account rules in Part 10 of this Plan may allow a high level of extraction to occur and place the rights of other licence holders at risk</li> <li>• The local impact management rules means that rights will not be exclusive but affected by the future location of works. Licences with existing water supply works (bores) will have priority over licences requiring new water supply works (bores)</li> </ul>
<p><b>Target 6a</b> The total volume of water specified on access licences reduced over the term of a water sharing plan to no more than 125% of the Sustainable Yield</p>	<p>FULL</p>	<ul style="list-style-type: none"> <li>• The total access licence share components for aquifers (and individual water sources) is greater than 125% of Sustainable Yield</li> <li>• This Plan provides for a reduction in share components in Year 1 to 100% of Sustainable Yield (which is set at recharge) except in Zones 1 and 5 which will be reduced to 125%</li> </ul>
<p><b>Target 10</b> Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable baseflows to the river to be maintained or improved</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> <li>• Detailed assessment of connectivity has not been undertaken</li> <li>• A review of groundwater dependent ecosystem requirements is being undertaken in the first 5 years, and mechanisms are in this Plan to change the environmental rules as a result of that review</li> </ul>

**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

PARTIAL

- Detailed assessment of groundwater dependent ecosystems and their environmental requirements has not been undertaken
- This Plan excludes licensed extraction from within 200 metres (or 100m for basic rights) of high priority groundwater dependent ecosystems which may be identified during the term of this Plan, and these may not be identified until Year 5
- This Plan allows for a review of groundwater dependent ecosystems by Year 6

**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

HIGH

- This Plan has identified the volumes necessary to meet domestic and stock requirements in each groundwater source
- This Plan protects domestic and stock bores from interference from higher yielding bores and local water level declines

**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

HIGH

- 2 Aboriginal community representatives have been involved in development of this Plan
- The Namoi Groundwater Management Committee that prepared this Plan attended Aboriginal cultural awareness training
- A Department of Land and Water Conservation (DLWC) Aboriginal Natural Resource Officer supported the Aboriginal representatives
- Meetings were held between the DLWC Aboriginal Natural Resource Officer and indigenous stakeholders, Elders and NSW Aboriginal Lands Council

**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

PARTIAL

- This Plan does not address Aboriginal cultural or traditional requirements specifically, but acknowledges that they are likely to be addressed through the environmental health water and local impact management provisions
- This Plan excludes licensed extraction from within 200 metres of high priority groundwater dependent ecosystems and any creeks and rivers where impact may occur on Aboriginal values

<b>Target 16a</b> All share components of access licences tradeable	FULL	<ul style="list-style-type: none"> <li>Part 11 of this Plan provides for trading of access licences</li> </ul>
<b>Target 16c</b> Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst HIGH also protecting existing access and environmental water		<ul style="list-style-type: none"> <li>This Plan does not allow trading out of these groundwater sources (justifiable)</li> <li>This Plan does establish rules for transfers between and within these groundwater sources, and establishes rules for minimising the impact of any transfers on existing licence holders and the environment</li> </ul>
<b>Target 16d</b> Reduced conversion factors only applied when necessary to offset increased losses associated with water supply delivery	FULL	<ul style="list-style-type: none"> <li>This Plan does not impose reduction factors</li> </ul>
<b>Target 16e</b> Any unassigned access rights identified and clear mechanisms established for their future assignment	N/A	<ul style="list-style-type: none"> <li>No unallocated water</li> </ul>
<b>Target 16f</b> Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	FULL	<ul style="list-style-type: none"> <li>In the Upper Namoi aquifer this Plan establishes 12 water sources, referred to as Zones 1 to 12, and prohibits trading between them excepting into Zone 10</li> </ul>
<b>Target 35</b> All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries	HIGH	<ul style="list-style-type: none"> <li>This Plan includes a water quality objective</li> <li>The beneficial use categories and criteria are specified</li> </ul>
<b>Target 38</b> Aquifer water quality vulnerability zones mapped and extraction limits reviewed to reduce the risk of lateral intrusion of poor quality water	PARTIAL	<ul style="list-style-type: none"> <li>No vulnerability mapping of these groundwater sources is referenced in this Plan</li> <li>This Plan includes rules to manage the lateral movement of poor quality water</li> </ul>

## Schedule 4 High priority groundwater dependent ecosystems

### Note—

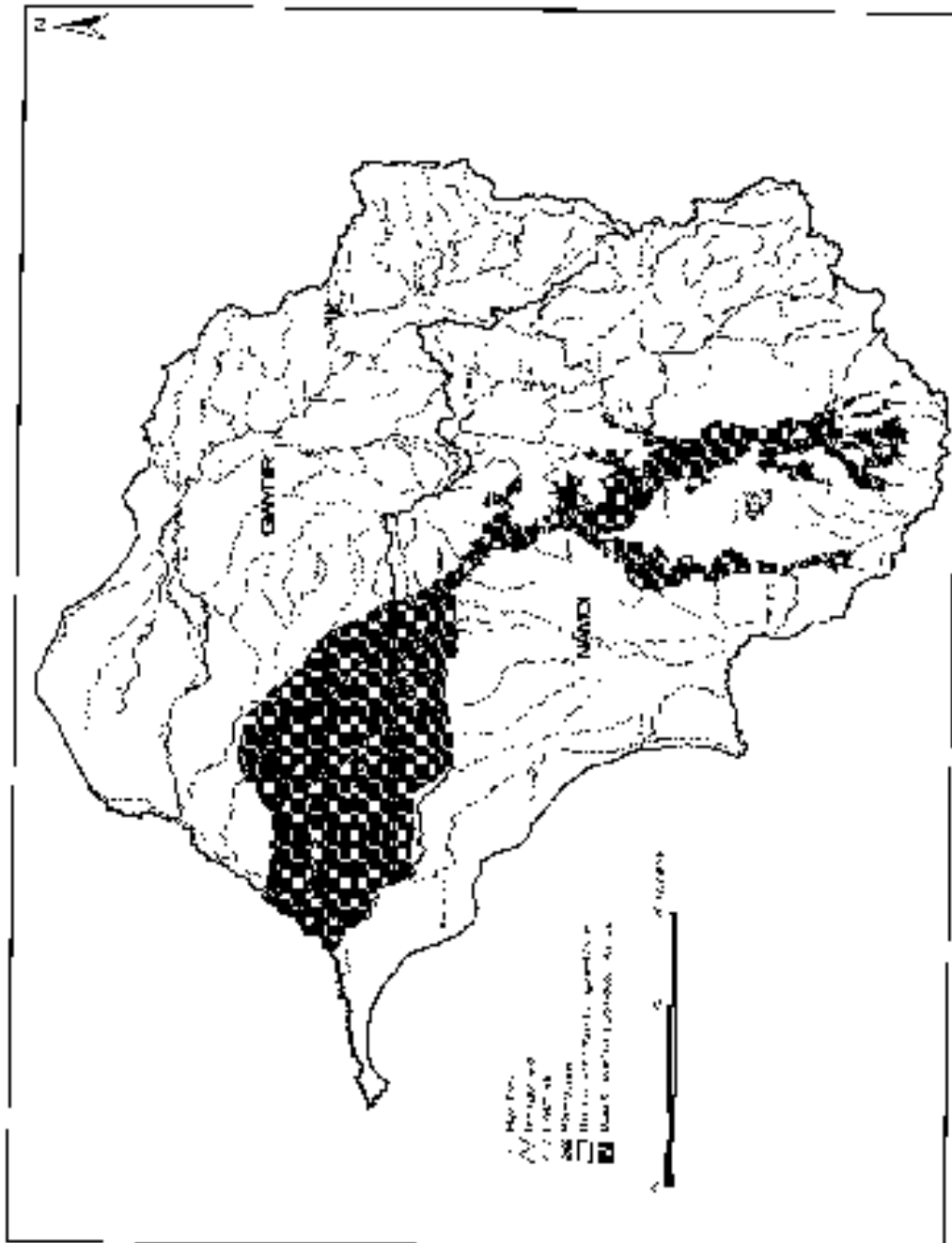
There are no high priority groundwater dependent ecosystems identified and scheduled at the commencement of this Plan.

### Note—

High priority groundwater dependant ecosystems may be added to (and removed from) this Schedule during the period of this Plan. The Regional or District Office of the Department of Land and Water Conservation, shown in Appendix 2, should be

contacted for a current list.

## Appendix 1 Namoi and Gwydir Water Management Areas



## Appendix 2 Location of maps

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

Regional Office  
Department of Land and Water Conservation

155-157 Marius St  
TAMWORTH NSW 2340

District Office  
Department of Land and Water Conservation  
53 Maitland St  
NARRABRI NSW 2390

District Office  
Department of Land and Water Conservation  
35-37 Abbott Street  
GUNNEDAH NSW 2380

## Appendix 3 Performance indicators

### Performance indicators for the Upper and Lower Namoi Groundwater Sources Water Sharing Plan

Performance indicator	Related objective	As measured by	Commentary
(a) Change in groundwater extraction relative to the extraction limit.	11 (a) 11 (b) 11 (c) 11 (g)	<ul style="list-style-type: none"> <li>Extraction volume for the groundwater source as a percentage of the extraction limit.</li> </ul>	<ul style="list-style-type: none"> <li>Plan provisions will set the mechanism to remain within the recharge over the long-term.</li> </ul>
(b) Change in climate adjusted groundwater levels.	11 (a) 11 (b) 11 (c) 11 (g)	<ul style="list-style-type: none"> <li>Average annual frequency and duration (in days) of water level drawdown below pre-plan baseline.</li> <li>Density of extraction in critical areas.</li> </ul>	<ul style="list-style-type: none"> <li>Note that water levels will fluctuate with climate and resultant variable recharge. Some level declines will be expected during dry times, just as level rises are expected during wetter periods.</li> </ul>

(c) Change in water levels adjacent to identified groundwater dependent ecosystems.	11 (a) 11 (c)	<ul style="list-style-type: none"> <li>• Identification of groundwater dependent ecosystems (GDEs).</li> <li>• Assessment of the relationship between selected GDEs and local groundwater levels in terms of the water requirements of these GDEs.</li> <li>• Assessment of the adequacy of buffer zones or local impact restrictions by comparison of water levels near in or GDEs compared to plan baseline.</li> <li>• Frequency and duration of water level drawdown below critical levels.</li> </ul>	<ul style="list-style-type: none"> <li>• Groundwater dependent ecosystems should be identified in the water sharing plans.</li> </ul>
(d) Change in groundwater quality.	11 (a) 11 (b) 11 (c)	<ul style="list-style-type: none"> <li>• Trends in selected water quality parameters at selected monitoring bores that are likely to be affected by groundwater extraction.</li> </ul>	<ul style="list-style-type: none"> <li>• Note that some water quality issues are a function of contamination by land based activities, rather than extraction.</li> </ul>
(e) Change in economic benefits derived from groundwater extraction and use.	11 (c) 11 (e) 11 (f) 11 (g)	<ul style="list-style-type: none"> <li>• Change in regional gross margins.</li> <li>• Change in unit price of water transferred.</li> <li>• Number of trades.</li> </ul>	<ul style="list-style-type: none"> <li>• Note that there are many factors affecting economic status of a region, for example commodity prices, other sources of water (ie surface water) etc.</li> <li>• Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of the plan provisions.</li> </ul>
(f) Change in structural integrity of the aquifer.	11 (a) 11 (b) 11 (c)	<ul style="list-style-type: none"> <li>• Annual number of reports of new land subsidence and reduced bore yields.</li> <li>• Survey if necessary.</li> </ul>	

<p>(g) Extent to which domestic and stock rights requirements have been met.</p> <p>11 (c) 11 (d)</p>	<ul style="list-style-type: none"> <li>• Monitor increase in applications for water supply work (bore) approvals.</li> <li>• Number of reports of interference between high yield extraction and basic rights, or number of domestic and stock bores deepened.</li> <li>• Assess frequency and duration of water level drawdown below critical thresholds.</li> <li>• Basic rights usage figures in water sharing plans are estimated (not actual use).</li> <li>• Increases in licences may be due to past unlicensed works.</li> </ul>
<p>(h) Extent to which local water utility requirements have been met.</p> <p>11 (c)</p>	<ul style="list-style-type: none"> <li>• Monitor increase in access by local water utilities.</li> <li>• Monitor impact of interference between high yield extraction and local water utility extraction.</li> <li>• Monitor increase in applications for water supply work (bore) approvals for native title basic rights.</li> </ul>
<p>(i) Extent to which native title rights requirements have been met.</p> <p>11 (c) 11 (d)</p>	<ul style="list-style-type: none"> <li>• Number of reports of interference between high yield extraction and native title rights holders, or number of bores deepened.</li> <li>• Assess frequency and duration of water level drawdown below critical thresholds.</li> </ul>
<p>(j) Extent of recognition of spiritual, social and customary values of groundwater to Aboriginal people.</p> <p>11 (a) 11 (c) 11 (e) 11 (f)</p>	<ul style="list-style-type: none"> <li>• Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people.</li> <li>• The collection of information on the values associated with water is considered the first step in addressing the objects of the Act.</li> <li>• It would be expected that at the end of five years there should be relevant information collected for each groundwater source, as a minimum requirement.</li> </ul>

## Appendix 4 Minister's access licence dealing principles

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

### Access Licence Dealing Principles Order 2002

#### Part 1 Introduction

##### 1 Name of Order

This Order is the [Access Licence Dealing Principles Order 2002](#).

##### 2 Commencement

This Order commences on 20 December 2002.

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

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

##### 4 Interpretation

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

##### 5 Effect

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

##### 6 Definitions

In this order the following definitions apply:

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

**farm dam** is a privately owned dam typically of earthen construction designed to collect

and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs.

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

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

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

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

**runoff harvesting dam** is a farm dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the [Water Management Act 2000](#).

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

## Part 2 General principles

### 7 Impacts on water sources

- (1) Dealings should not adversely affect environmental water and water dependent ecosystems as identified in any relevant management plan.
- (2) Dealings should be consistent with any strategies to maintain or enhance water quality identified in any relevant management plan.
- (3) In unregulated river water sources, dealings should not increase commitments to take water from water sources or parts of water sources identified in any relevant management plan as being of high conservation value.
- (4) In unregulated river water sources or a groundwater sources, dealings should not increase commitments to take water from water sources or parts of water sources above sustainable levels identified in any relevant management plan.
- (5) In regulated river water sources, dealings should not increase daily demand for water delivery at those locations and times where it is identified in any relevant management plan that demand exceeds delivery capacity.
- (6) In regulated river water sources, dealings should not increase commitments to take water in lower river or effluent systems where this will result in flow at greater than 80% of channel capacity for more than 10% of days used for water delivery.

- (7) In this clause, **commitments to take water** refers, in relation to all access licences with nominated works in that water source or part of a water source, to:
- (a) the total volume of share components, or
  - (b) the total volume of water allocations in water allocation accounts, or
  - (c) where relevant, the sum of limits on rates of extraction in extraction components.

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

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

## **9 Impacts on water users**

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

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

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

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

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

- (1) This clause applies to dealings under section 71A of the Act.
- (2) Dealings under section 71A are prohibited:

- (a) if there is an outstanding debt under the Act in respect of the licence, or
  - (b) if the licence is suspended under section 78 of the Act.
- (3) Access licence dealing rules established by a management plan shall not regulate or prohibit dealings under section 71A of the Act.

**Note—**

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

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

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

component volume of the new licence.

- (6) The share component on a new access licence issued under a dealing under section 71B is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factor rules in management plans:
  - (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining available water to other access licences, and
  - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licence.
- (9) For conversion of category from regulated river (high security), unregulated river or aquifer to major utility and vice versa:
  - (a) a major utility licence may only be converted to another category if it has components relating to only one water source, and
  - (b) subject to imposing such mandatory conditions as are required by the relevant management plan for the new category, the extraction component on the cancelled licence is to be carried over to the new licence.
- (10) For conversion of category from regulated river (general security) to regulated river (high security) and vice versa, and for conversion of category from domestic and stock to regulated river (high security) and vice versa, the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (11) For conversion of category from regulated river (conveyance) to regulated river (high security) or regulated river (general security), the extraction component on the cancelled licence is to be carried over to the new licence, subject to imposing such mandatory conditions as are required by the relevant management plan for the new category.
- (12) For conversion of category from regulated river (general security) to unregulated river:
  - (a) no parts of the extraction component on the cancelled licence are to be carried over to the new licence, and

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

**Note—**

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

### **13 Subdivision of access licences**

- (1) This clause applies to subdivision dealings under section 71C of the Act.

- (2) Dealings under section 71C are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of the licence, or
  - (b) if the licence is suspended under section 78 of the Act.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licence may be carried forward to the new licences.
- (4) The category of the new licences is to be the same as the category of the cancelled licence.
- (5) The areas or locations specified in the cancelled licence are to be carried over to all the new licences.
- (6) Any indivisible parts of the times, rates or circumstances specified in the extraction component of the cancelled licence are to be carried forward to all the new licences.
- (7) Water allocations remaining in the water allocation account of the cancelled licence are to be credited to the new licences so that the combined water allocations in the accounts of the new licences are no greater than the water allocations which remained in the account of the cancelled licence.
- (8) Access licence dealing rules established by a management plan shall not regulate or prohibit subdivision dealings under section 71C of the Act.

**Note—**

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

#### **14 Consolidation of access licences**

- (1) This clause applies to consolidation dealings under section 71C of the Act.
- (2) Consolidation dealings under section 71C are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of any of the licences, or
  - (b) if any of the licences are suspended under section 78 of the Act, or
  - (c) if the licences to be consolidated do not have share components in the same water source, or
  - (d) if the location or area specified in the extraction component of the licences is not the same.
- (3) Subject to the granting of an application under section 71J, any nominated water supply works on the cancelled licences may be carried forward to the new licence.

- (4) Water allocations remaining in the water allocation accounts on the cancelled licences are to be credited to the new licence so that the water allocations in the account of the new licence is no greater than the sum of the water allocations remaining in the accounts of the cancelled licences.
- (5) Access licence dealing rules established by a management plan shall not regulate or prohibit consolidation dealings under section 71C of the Act.

**Note—**

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

## **15 Assignment of rights under access licences**

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

**Note—**

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

## **16 Change of water source**

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

- (c) if the licence does not have the share component expressed as a volume, or
  - (d) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
  - (e) from an unregulated river water source to a regulated river water source, or
  - (f) from a groundwater source to a regulated river or unregulated river water source, or vice versa, or
  - (g) if the licence is of category major water utility or supplementary.
- (3) A dealing under section 71E is prohibited unless there is a hydrologic connection between the water sources of the cancelled and issued licences.
- (4) A dealing under section 71E is prohibited unless provisions of the relevant management plans:
- (a) protect environmental water from being affected by such dealings, and
  - (b) protect basic landholder rights from being affected by such dealings, and
  - (c) protect the available water under other access licences from being affected by such dealings.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) The share component on the new access licence is to be of a volume equal to the volume on the cancelled licence multiplied by a conversion factor determined by the Minister in accordance with any rules set out in relevant management plans.
- (7) Conversion factors rules in management plans:
- (a) must be based on protecting environmental water and basic landholder rights as specified in the management plans, and maintaining the available water to other access licences, and
  - (b) are not to be set for the purpose of achieving a reduction in overall water extraction from water sources.
- (8) Nominated water supply works on the cancelled licence are not to be carried over to the new licence.
- (9) No water allocations remaining in the water allocation account of the cancelled licence may be credited to the new licence.
- (10) Subject to the other parts of this clause, access licence dealing rules may prohibit or

regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

**Note—**

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

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

- (1) This clause applies to amendment of extraction component dealings under section 71F of the Act.
- (2) Dealings under section 71F are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of the licence,
  - (b) if the licence is suspended under section 78 of the Act, or
  - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences.
- (3) Amendment of the times, rates and circumstances part of the extraction component may only occur where:
  - (a) access licence dealing rules in the relevant plan make provision for it consistent with the principles in Part 2 of this order, and
  - (b) those rules specifically indicate the nature of those amendments which are allowed.
- (4) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

**Note—**

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

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

- (1) This clause applies to assignment of water allocation dealings under section 71G of the Act.
- (2) Dealings under section 71G are prohibited:
  - (a) if either of the access licences is suspended under section 78 of the Act, or

- (b) if either of the access licences are of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
  - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on both access licences, or
  - (d) if any of the access licences is of category runoff harvesting, or
  - (e) if any of the access licences is of category major utility, unless specific provision is made in access licence dealing rules to allow this, or
  - (f) from a supplementary water access licence to a licence of any other category.
- (3) Assignment of water allocations between access licences relating to different water sources is prohibited if:
  - (a) either licence is of category supplementary, or
  - (b) there is no hydrologic connection between the water sources, or
  - (c) one water source is a regulated river and the other is an unregulated river, or
  - (d) one water source is a groundwater source and the other is a regulated river or unregulated river water source.
- (4) Assignment of water allocations between access licences relating to different water sources is prohibited unless provisions of the relevant management plans:
  - (a) protect environmental water from being affected by such dealings, and
  - (b) protect basic landholder rights from being affected by such dealings, and
  - (c) protect the available water under other access licences from being affected by such dealings.
- (5) Assignment of water allocations from a local water utility access licence is prohibited unless:
  - (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
  - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
  - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or

regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

## **19 Interstate transfer dealings**

- (1) This clause applies to dealings under section 71H of the Act.
- (2) Any dealings under section 71H must be consistent with the relevant inter-state agreement.
- (3) Dealings under section 71H are prohibited unless the waters for which the interstate access licence equivalent has or will have rights to are hydrologically connected to the water source in which to which the access licence to be issued or revoked relates.
- (4) Dealings under section 71H which revoke an access licence are prohibited:
  - (a) if there is an outstanding debt under the Act in respect of the licence, or
  - (b) if the licence is suspended under section 78 of the Act, or
  - (c) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, or
  - (d) if the licence is of category local water utility or major water utility.
- (5) The share and extraction components of a new licence issued under this dealing must comply with any requirements that are specified in the relevant management plan for a licence granted under section 63 of the Act.
- (6) Dealings under section 71H are prohibited unless arrangements are in place which:
  - (a) protect environmental water from being affected by such dealings, and
  - (b) protect basic landholder rights from being affected by such dealings, and
  - (c) protect the available water under other access licences from being affected by such dealings.
- (7) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

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

- (1) This clause applies to interstate assignment of water allocation dealings under section 71I of the Act.
- (2) Any dealings under section 71I must be consistent with the relevant inter-state agreement.

- (3) Dealings under section 71I are prohibited:
- (a) if the access licence is suspended under section 78 of the Act, or
  - (b) if the licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, or
  - (c) if a method of measurement of water extraction which is satisfactory to the Minister is not established for all nominated water supply works on the access licence, or
  - (d) if the access licence is of category runoff harvesting or supplementary water, or
  - (e) if the access licence is of category major utility, unless specific provision is made in access licence dealing rules in the relevant management plan to allow this.
- (4) This dealing is prohibited unless arrangements are in place which:
- (a) protect environmental water from being affected by the dealing, and
  - (b) protect basic landholder rights from being affected by the dealing, and
  - (c) protect the available water under other access licences from being affected by the dealing.
- (5) Interstate assignment of water allocations from a local water utility access licence is prohibited unless:
- (a) the Minister has approved a demand management plan for all NSW towns supplied under the local water utility access licence, and
  - (b) the Minister has approved a drought management plan for all NSW towns supplied under the local water utility access licence, and
  - (c) the Minister is satisfied the assignment will not put the water supply for NSW towns supplied by the local water utility at risk.
- (6) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.

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

- (1) This clause applies to nomination of water supply works dealings under section 71J of the Act.
- (2) Dealings under section 71J are prohibited if the access licence is suspended under section 78 of the Act.

- (3) Dealings under section 71J are prohibited if the access licence is of a kind which is not subject to embargo in accordance with an order made under sections 80 or 81 of the Act, apart from local water utility access licences, with the following exceptions:
  - (a) if new or additional works are to be nominated, where those works supply the same property as the current nominated works, or a contiguous property to the property supplied by the current nominated works which is occupied by the same landholder, or
  - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (4) Dealings under section 71J are prohibited if the access licence is of category local water utility, with the following exceptions:
  - (a) if new or additional works are to be nominated, that those works supply the same town water supply scheme as the current nominated works, or
  - (b) if a nominated work is withdrawn, that there remains at least one nominated work.
- (5) Nomination of a water supply work is prohibited if the access licence does not have an extraction component allowing taking of water at the location of the nominated work.
- (6) With regard to runoff harvesting access licences:
  - (a) the nominated work must be a runoff harvesting dam of capacity consistent with the share component of the access licence, and
  - (b) withdrawal of nominated work may only be granted where arrangements are in place to ensure that the nominated work does not conserve any more water than is permitted pursuant to the exercise of basic landholder rights.
- (7) Withdrawal of nomination may not be prohibited by access licence dealing rules, except for as otherwise specified in this clause.
- (8) Subject to the other parts of this clause, access licence dealing rules may prohibit or regulate these dealings provided this is done consistent with the principles in Part 2 of this order.