

NEW SOUTH WALES

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SPECIAL SUPPLEMENT

Water Sharing Plan for the Lower Gwydir Groundwater Source 2003 Amendment Order 2006

under the

Water Management Act 2000

Pursuant to section 45(1) of the *Water Management Act 2000*, I, the Minister for Natural Resources, make the following Order.

Dated this twenty fifth day of September 2006.

IAN MACDONALD, MLC, Minister for Natural Resources

Explanatory Note

This Order amends the *Water Sharing Plan for the Lower Gwydir Groundwater Source 2003 Order* as published in the Government Gazette of 26 February 2003 as amended.

Water Sharing Plan for the Lower Gwydir Groundwater Source 2003 Amendment Order 2006

1. Name of Order

This Order is the *Water Sharing Plan for the Lower Gwydir Groundwater Source Amendment Order* 2006.

2. Commencement

This Order commences on 1 October 2006.

3. Amendment of Water Sharing Plan for the Lower Gwydir Groundwater Source 2003

The Water Sharing Plan for the Lower Gwydir Groundwater Source 2003 is amended as set out in Schedule 1

Schedule 1 Amendments

[1] Clause 3

Omit the clause. Insert instead:

3 Date of commencement

This Plan takes effect on 1 October 2006, and ceases on the 30 June 2017.

[2] Subclause 12(d)

Omit the subclause. Insert instead:

(d) reduce the total share component of access licences to the final extraction limit,

[3] Clause 16

Omit the clause. Insert instead:

- (1) The overall basis for water sharing in this Plan is the average annual recharge to this groundwater source, estimated to be 38,000 megalitres per year (hereafter *ML/yr*) plus the requirements for basic landholder rights at the commencement of this plan.
- (2) The Minister may under section 45 (1) (b) of the Act amend subclause (1) after 30 June 2010 to vary the average annual recharge value following further recharge studies undertaken by the Minister.

Note. The extent to which this change may impact on access licence holders is limited by clause 28.

[4] Clause 18 Environmental health water

Omit the clause. Insert instead:

18 Planned environmental water

Note. It is anticipated that the planned environmental 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 (h)).

- (1) This Plan establishes the following planned environmental water rules:
 - (a) subject to Part 10 Division 2 of this Plan, the physical water contained in the storage component of this groundwater source, minus the amount required for supplementary water access permitted under clause 25, as varied by clause 29 will be reserved for the environment,
 - (b) subject to Part 10 Division 2 of this Plan, 15% of an amount that is equal to the long-term average annual recharge to this groundwater source minus basic landholder rights requirements at the commencement of this plan, being 5,700 ML/yr, is reserved for the environment.

Note. Access to water under supplementary water access licences in this water source will not be permitted after the 30 June 2015 and the physical water contained in the storage component of this groundwater source plus 15% of the long-term average annual recharge to this groundwater source minus an amount for basic landholder rights requirements at the commencement of this Plan will be reserved for the environment.

(2) The Minister may under section 45 (1) (b) of the Act amend subclause (1) (b) after 30 June 2010 vary the proportion of recharge reserved as planned environmental water based on further studies of groundwater ecosystem dependency undertaken by the Minister.

Note: The studies may recommend management options other than reservation of a portion of recharge to protect groundwater dependant ecosystems.

Note: The extent to which this change may impact on access licence holders is limited by clause 28.

[5] Clause 19 Supplementary environmental water

Omit the clause.

[6] Clause 20 Adaptive environmental water

Omit the clause. Insert instead:

20 Adaptive environmental water

- (1) Water may be committed in this water source for environment purposes by an adaptive environmental water condition pursuant to section 8B of the Act.
- (2) The holder of an access licence may request that the Minister impose an adaptive environmental water condition in respect of the whole or a part of the share component of the access licence.
- (3) The condition imposed under subclause (2) will continue until the holder requests its removal.

- (4) An access licence may be held by the Minister, a catchment management authority or other public body to the extent that the whole or part of that access licence has been surrendered as a result of on farm water savings made by works or other improvements, subject to:
 - (a) the share component of the access licence held being equal to the value of the on-farm water savings made,
 - (b) the access licence held being the highest priority category in this water source, other than a specific purpose category, and
 - (c) an adaptive environmental water condition being imposed on the access licence and that condition not being removed.
- (5) The adaptive environmental water condition specified in subclause (1) and the plan for implementation of that condition, as required by section 8E(7) of the Act:
 - (a) are to be established by the Minister, and
 - (b) shall be such as to ensure that there will be a contribution to the objectives of this Plan.
- (6) The allocation of water for access licences with an adaptive environmental water condition will be in accordance with the available water determination for the relevant category of access licence under this plan.
- (7) If the adaptive environmental water condition on an access licence requires the water to be left in the water source for environmental purposes, then the water allocation account is to be debited when the water is available in accordance with the adaptive environmental water condition on the access licence.
- (8) If the adaptive environmental water condition requires the environmental water to be taken from the water source then the water allocation account is to be debited when it is taken.
- (9) For the purposes of auditing compliance with the long-term extraction limit under this plan, the delivery of water pursuant to an access licence that has been committed as adaptive environmental water shall be accounted for as extraction where it occurs pursuant to a licence under subclause (2) or subclause (4).
- (10) To the extent that the water allocation of an access licence which is subject to an adaptive environmental water condition is not required to meet the requirement of the condition it may be the subject of an assignment dealing in accordance with the Dealings Rules in this plan.
- (11) Notwithstanding subclause (10) an access licence with an adaptive environmental water condition may be the subject of any other dealing permitted by the Dealing Rules in this plan, provided the benefit to the environment provided for in the adaptive environmental condition is not diminished.
- (12) At the commencement of this clause, there were no access licences with an adaptive environmental water condition in this water source.

[7] Clause 21 Basic landholder rights

Omit the clause. Insert instead:

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 Minister may amend a water supply works approval to allow the landholder's affected bore to be replaced or deepened to ensure continuing access to water for basic landholder rights', or
 - (b) the Minister may amend another water supply works approval so that basic rights water may be supplied by an alternative water supply work means during critical times.
- (3) In accordance with the legislative requirements, the Minister may impose a charge on access licence holders in this groundwater source under section 114 of the Act, as a contribution to the costs of activities or works associated with subclause (2).
- (4) Basic landholders rights exercised under section 52 of the Act must be exercised in accordance with any guidelines established by the Minister with respect to the reasonable use of water for domestic consumption and stock watering by landholders authorised to use water for either or both of those purposes.

Note. The Minister may, by order made under section 323 of the Act, impose temporary restrictions on basic landholder rights when it is necessary to do so in the public interest, such as to cope with a water shortage or threat to public health or safety.

Note. The Minister may enforce any reasonable use guidelines by serving orders on individual landholders under section 325 of the Act. The Minister may also order individual landholders accessing basic landholder rights to take specified measures to protect the environment, to preserve basic landholder rights or to overcome a threat to public health under section 328 of the Act.

[8] Clause 25 Estimate of water requirements

Omit the clause. Insert instead:

25 Requirements for water under access licences

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

Note. The amount of water specified in this Part represents the total volumes or total shares specified in the share components on access licence in this groundwater source. The actual volume of water available at any time will depend on climate, access licence priority and the rules in this Plan.

[9] Insert the following after clause 25:

25A Share components of domestic and stock access licences

It is estimated that at the time of commencement of this Plan, the share components of domestic and stock access licences authorised to extract water from this groundwater source will total 0 ML/yr.

25B Share components of local water utility access licences

It is estimated that at the time of commencement of this Plan, the share components of local water utility access licences authorised to extract water from this groundwater source will total 3,581 ML/yr.

Note. Clause 25B represents the total volumes specified on access licences in this groundwater source, it is not a commitment to supply that water.

Note. The total 3,581 ML/yr for local water utility access licences is made up of 3,506 ML/yr for Moree, 73 ML/yr for Pallamallawa and 2 ML/yr for Ashley.

25C Share components of aquifer access licences

- (1) For those Water Act 1912 entitlements equal to or less than 50 ML that are to become aquifer access licences in this groundwater source at the commencement of this Plan, the share component is to be equal to the Water Act 1912 entitlement.
- (2) For each entitlement referred to in Column 1 of Schedule 6 applying to the licences listed in Column 2 of Schedule 6 that are to become aquifer access licences in this groundwater source at the commencement of this Plan, the share component is to be equal to the share component in Column 3 of Schedule 6.
- (3) For those Water Act 1912 entitlements not listed in Column 1 of Schedule 6 and greater than 50 ML that are to become aquifer access licences in this groundwater source at the commencement of this Plan, the share component will be established in accordance with the following formula:

$$SC_{AAL} = [AE / \sum AE \times (R - PEW - LWU - \sum SL - WAE_P - \sum EXC)] + 50$$

Where:

- (a) SC_{AAL} is the share component of the aquifer access licence,
- (b) AE is the adjusted entitlement calculated from the following formula:

$$AE = (HOE_R \times 0.9) + ((WAE_R - HOE_R) \times 0.1)$$

Where:

- (i) $HOE_R = 0$ where $HOE \le 50$,
- (ii) $HOE_R = HOE 50$ where HOE > 50
- (iii) HOE is as defined in subclause (4),
- (iii) $WAE_R = WAE 50$, and
- (iv) WAE is the Water Act 1912 entitlement,
- (c) \sum AE is the total of all adjusted entitlements calculated under subclause (3)(b),
- (d) R is the amount of recharge established in clause 16 (1),
- (e) PEW is the volume of recharge reserved as planned environmental water in clause 18 (1)(b),

- (f) LWU is the total of local water utility access licence share components in this groundwater source at the commencement of this Plan,
- (h) \sum SL is the total of all Water Act 1912 entitlements that are less than or equal to 50 ML as defined in clause (1).
- (i) WAE_P is the protected entitlement for entitlements where WAE \geq = 50 and is equal to the number of entitlements greater than 50 ML multiplied by 50,
- (j) $\sum EXC$ is the sum of share components specified in Column 3 of Schedule 6.
- (4) For the purposes of subclause (3) and clause 25D HOE is equal to the greater of:
 - (a) the average extraction over the five water years from 1993/94 to 1997/98 not exceeding the Water Act 1912 entitlement prior to the commencement of this Plan excluding zero and low extraction years prior to activation, or
 - (b) the average extraction over the five water years from 1997/98 to 2001/02 not exceeding the Water Act 1912 entitlement prior to the commencement of this Plan and excluding zero and low extraction years prior to activation, or
 - (c) the average extraction over the six water years from 1997/98 to 2002/03 not exceeding the Water Act 1912 entitlement prior to the commencement of this Plan and excluding zero and low extraction years prior to activation.

Note. The rules for determining HoE are contained in Appendix 6.

- (5) For the purposes of subclause (4) zero and low extraction years are years where extraction was less than 20% of the maximum volume of water extracted in any one year between 1993/94 and 2002/03.
- (6) For the purposes of subclause (5) activation is defined as the first year in which a licence holder extracted 20% or more of the maximum volume of water extracted in any one year between 1993/94 and 2002/03.
- (7) It is estimated that at the time of commencement of this Plan the share components of access licences established under this clause will total 28,719 megalitres.

25D Share components of supplementary water access licences

- (1) Those Water Act 1912 entitlements that are to be converted to an aquifer access licence in this groundwater source under clause 25C (2) may also receive a supplementary water access licence.
- (2) The share component of a supplementary water access licence converted under subclause (1) will be established for those licences where $HOE > SC_{AAL}$ in accordance with the following formula:

$$SC_{SWAL} = HOE - SC_{AAL}$$

where:

(a) HOE is as defined in clause 25C (4),

- (b) SC_{AAL} is the share component of the aquifer access licence established under clause 25C (2) and clause 25C(3).
- (c) SC_{SWAL} is the share component for the supplementary water access licence.
- (3) It is estimated that at the time of commencement of this Plan the sum of supplementary water access licences established under subclause (1) will total 14,200 ML.

Note: Not all aquifer access licences amended under clause 25C will receive a supplementary water access licences. Only those licences that have a HOE as defined in clause 25C(4) which is greater than their new Aquifer Access Licence Share component will receive a supplementary water access licences.

25E Changes to share components

- (1) This Plan recognises that the total requirements for water for extraction within this groundwater source may change during the term of this Plan as a result of:
 - (a) the granting, surrender or cancellation of access licences, or
 - (b) the variation of local water utility access licences under section 66 of the Act.
- (2) Pursuant to section 68A of the Act the share component of each supplementary water access licence will be reduced to 0 ML on 1 July 2015.
- (3) Pursuant to section 77A of the Act supplementary water access licences will be cancelled after 1 July 2015.

[10] Clause 26 Rules for granting access licences

Omit the clause. Insert instead:

26 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b), 61 and 63 of the Act, having regard to the limits to water availability in this groundwater source and the need to protect groundwater dependent ecosystems, aquifer integrity and groundwater quality.
- (2) Applications for access licences may be made and access licences granted in this groundwater source if they are for:
 - (a) a specific purpose access licence for which application is provided for under clause 19 of the Water Management (General) Regulation 2004 (hereafter *the Regulation*) in accordance with section 61 (1) (a) of the Act,

Note. At the commencement of this Plan, clause 19 of the Regulation provides for the following specific purpose access licences to be applied for:

- (a) a local water utility access licence (subcategory "domestic and commercial"), for the purpose of domestic consumption and commercial activities,
- (b) a domestic and stock access licence (subcategory "domestic"), for the purpose of domestic consumption,

- (c) an aquifer access licence (subcategory "town water supply"), for the purpose
 of supply to communities for domestic consumption and commercial activities,
 and
- (d) any category of specific purpose access licence (subcategory "Aboriginal cultural"), for Aboriginal cultural purposes.

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

- (b) an access licence with a zero share component in accordance with sections 61 (1) (b) and 63 (5) of the Act,
- (c) an access licence that may be granted in accordance with a dealing that is permitted by Part 11 of this Plan,
- (3) 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.
- (4) 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 Division2 of this Plan.
- (5) An access licences may be granted in this groundwater source where:
 - (a) a Water Act 1912 licence was not converted at the commencement of this plan, or
 - (b) a licence is found to be taking water from a water source in this plan but has been incorrectly identified as taking water from another groundwater source and the licence is cancelled in the other water source.
- (6) Aquifer access licences granted under subclause (5) shall be subject to the rules specified in clauses 25C and 25D.

[11] Clause 27 Extraction limit

Omit the clause. Insert instead:

27 Extraction limit

- (1) This Division is made in accordance with section 20 (2) (a) of the Act.
- (2) The extraction limit for this groundwater source is initially 32,300 ML/yr, plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan.

[12] Clause 28 Variation of the extraction limit

Omit the clause. Insert instead:

28 Variation of extraction limits

- (1) The Minister may under section 45 (1) (b) of the Act amend clause 27 after 30 June 2010 to vary the extraction limit in accordance with:
 - (a) any change to the average annual recharge arising from subclause 16 (2), and
 - (b) any change to the planned environmental water arising from subclause 18 (2).
- (2) If there is any change to the extraction limit arising from subclause (1) then:
 - (a) the extraction limit will not be greater than 38,760 ML/yr, plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan and,
 - (b) the extraction limit will not be less than 25,840 ML/yr, plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan.

[13] Insert the following clause after clause 28:

28A Compliance with the extraction limit

- (1) Water extraction in this groundwater source will be monitored each water year to determine if there is any growth in volume extracted above the extraction limit specified in clause 27, based a comparison of the extraction limit against the extraction within this groundwater source over that year and the preceding 2 years.
- (2) For the purposes of auditing compliance with the extraction limit, if water that:
 - (a) pursuant to an access licence is committed as adaptive environmental water to be left in the aquifer for environmental purposes, then extraction will be assumed to be equal to 100% of the available water determination made under clause 29, or
 - (b) pursuant to an access licence is committed as adaptive environmental water to be extracted for environmental purposes, then extraction will be that measured through the approved water supply work (bore).
- (3) If the 3 year average of extraction in this groundwater source exceeds the extraction limit established in clause 27 by 5% or greater, then the available water determination made for aquifer access licences under clause 29 (5) for the following water year, should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the extraction limit.

[14] Clause 29 Available water determinations

Omit the clause. Insert instead:

29 Available water determinations

(1) This Division is made in accordance with section 20 (2) (b) of the Act.

- (2) Pursuant to section 58(4) of the Act this plan amends the relative priorities of the categories of aquifer access licence and supplementary water access licence to the extent necessary to legally make the available water determinations as set out in this clause.
- (3) All available water determinations in this groundwater source shall be expressed as either:
 - (a) a percentage of the share component for all access licences where share components are specified as megalitres per year, or
 - (b) megalitres per unit of share component for all access licences where share components are specified as a number of shares.
- (4) An available water determination for each category of access licence in this groundwater source should be made at the commencement of each water year.
- (5) The available water determinations made at the commencement of the water year for domestic and stock and local water utility access licences should be 100% of share components.
- (6) The available water determination made at the commencement of the water year for aquifer access licences should be such that the total of available water determinations under this clause equals the extraction limit set in clause 27 (2) as varied by clause 28 minus the total requirements for basic landholder rights, minus the total available water determinations for domestic and stock and local water utility access licences and supplementary water access licences, or such lower amount as results from the operation of clause 28A (3).
- (7) The available water determination made at the commencement of this plan and at the commencement of the 2007/08, and 2008/09 water years for supplementary water access licences should be 1 ML per unit of share component.
- (8) The available water determination made at the commencement of each year after the 2008/09 water year for supplementary water access licences will be reduced by a further 0.143 ML per unit of share component per year, and
- (9) The available water determination for supplementary water access licences will be reduced to 0 ML per unit of share component at the commencement of the 2015/16 water year.

Note. Subclause (8) means that allocations for supplementary water access licences will diminish each year by 0.143 ML per unit share after 2008/09 water year. For example, the available water determination for 1 October 2006 to 30 June 2007 is 1.0, 2007/08 water year is 1.0, 2008/09 water year is 1.0, 2009/10 water year is 0.857, 2010/11 water year is 0.714, 2011/12 water year is 0.571, 2012/13 water year is 0.429, 2013/14 water year is 0.286, 2014/15 water is 0.143, and 2015/16 water year is 0.

[15] Note following clause 32

Omit the note. Insert instead:

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

[16] Clause 34 Annual accounting for water extraction

Omit the clause. Insert instead:

34 Annual accounting for water extraction

- (1) Water taken from this groundwater source will be accounted for at least annually.
- (2) Water taken by a water supply work (bore) nominated by an access licence will be periodically debited against the access licence water allocation account.
- (3) A water allocation account shall remain at or above zero at all times.
- (4) Unused water allocations in the water allocation accounts of domestic and stock access licences or of local water utility access licences, cannot be carried over from one water year to the next.
- (5) In any water year, subject to local impact management restrictions arising from Part 10, Division 2 of this Plan, water taken from this groundwater source 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 equal to:
 - (a) 100% of the share component of the access licence,
 - (b) plus any water allocations assigned from another access licence under section 71T 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 71T of the Act in that year.
- (6) Unused water allocations in the water allocation accounts of aquifer access licences may be carried over from one water year to the next, subject to subclause (7).
- (7) The maximum amount of unused water allocations that can be carried over under subclause (6) is equal to 2 ML per unit of share component.
- (8) In any water year, subject to local impact management restrictions arising from Part 10, Division 2 of this Plan, water taken from this groundwater source under an aquifer access licence may not exceed a volume that is equal to:
 - (a) 2 ML per unit of aquifer access licence share component,
 - (b) plus any water allocations assigned from another access licence under section 71T of the Act in that year, and
 - (c) minus any water allocations assigned to another access licence under section 71T of the Act in that year.
- (9) Total water in any aquifer access licence water allocation account at any time may not exceed a volume consisting of:
 - (a) 3 ML per unit of aquifer access licence share component,

- (b) plus any water allocations assigned from another licence under section 71T of the Act in that year,
- (c) minus any water allocations assigned to another licence under section 71T of the Act in that year.
- (10) Unused water allocations in the water allocation accounts of supplementary water access licences, cannot be carried over from one water year to the next.
- (11) In any water year, subject to local impact management restrictions arising from Part 10, Division 2 of this Plan, water taken from any of this groundwater source under a supplementary water access licence, may not exceed the allocation resulting from the available water determination.
- (12) Where both an aquifer access licence and a supplementary water access licence nominate the same water supply works and use approval, water allocations will be debited from a supplementary water access licence water allocation account before water is debited from an aquifer access licence water allocation account.
- (13) Subclauses (4) to (12) do not apply to any access licence specified in Schedule 4 of this Plan.
- (14) Any access licence specified in Schedule 4 will be subject to the water allocation account management rules specified in that Schedule, in addition to clauses 31, 32, 33, 34 (1) to (4) and 34(14).

[17] Clause 44 Access licence dealing rules

Omit the clause. Insert instead:

44 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted under section 71Z of the Act.
- (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 71Z of the Act and the rules in this Part.

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

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71Z of the Act provides for the Minister's access licence dealing principles to prevail.

[18] Subclause 45 (1)

Omit the subclause. Insert instead:

(1) This clause applies to any relevant dealings under sections 71Q, 71S, and 71W of the Act, and section 71T of the Act with respect to allocation assignments within this groundwater source.

[19] Clause 46 Rules for change of water source

Omit the clause. Insert instead:

46 Rules for change of water source

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

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

(2) Dealings under section 71R of the Act that change the water source to which an access licence applies are prohibited in this groundwater source.

[20] Subclause 47 (1)

Omit the subclause. Insert instead:

(1) This clause relates to dealings under section 710 of the Act.

[21] Subclause 48 (1)

Omit the subclause. Insert instead:

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

[22] Subclause 49 (1)

Omit the subclause. Insert instead:

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

[23] Subclause 50 (1)

Omit the subclause. Insert instead:

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

[24] Subclause 52 (2)

Omit the subclause. Insert instead:

(2) All supplementary water access licences shall have mandatory conditions to give effect to clause 25E (2) and (3), in relation to the amendment of access licence share components and cancellation of supplementary water access licences.

[25] Clause 54 Monitoring

Omit the clause. Insert instead:

54 Monitoring

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

Note. Review and Audit of this Plan

In accordance with section 43A of the Act, the Natural Resources Commission must undertake a review of this Plan prior to any decision to extend its term or to make a new plan. The review must consider the extent to which the Plan's water sharing provisions have contributed to achieving or not achieving the relevant natural resource management standards and targets in the catchment management area (as referred to in section 5 of the Catchment Management Authorities Act 2003).

When undertaking this review the Natural Resources Commission is required to call for public submissions. The Commission will take into consideration any submission received as well as any other relevant State-wide or regional government policies or agreements that apply to the catchment management area.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with a water management committee where one exists.

Note. The Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51 (5) of the Act, the implementation program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program will be included in the annual report for the Department.

[26] Clause 55 Amendment of this Plan

Omit the clause. Insert instead:

55 Amendment of this Plan

- (1) This Part is made in accordance with section 45 (1) (b) of the Act.
- (2) This Plan can be amended in accordance with the following clauses of this Plan:
 - (a) clause 16 in respect to the average annual recharge,
 - (b) clause 18 in respect to planned environmental water,
 - (c) clause 28 in respect to the extraction limit,
 - (d) clause 39 in respect to high priority groundwater dependent ecosystems.

[27] Schedule 1 Dictionary

Include the following:

long term average storage component is the volume of water in the aquifer less the combined average annual recharge and requirements for basic rights at the commencement of this plan, and exceeds the requirements for supplementary access provided for in this Plan.

water year is a 12 month period from 1 July to 30 June.

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

Omit the schedule. Insert instead:

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

Levels of assessed contribution:

FULL – contributes to target in full HIGH - while not fully contributing to target, there is a good level of contribution PARTIAL - goes some way to contributing to the target LOW - only small degree of contribution to the target

Relevant target	Level of contribution	Comments
Target 1e The long term average annual extractions for groundwater limited (or being phased down) to an ecologically sustainable level (the Sustainable Yield) as determined by detailed assessment of each groundwater source and consultation with the relevant management committee. In the absence of such an assessment, the following to apply: 100 percent of average annual recharge for a groundwater source where there is no significant ecosystem dependency; 70 percent of average annual recharge where there is significant ecosystem dependency	PARTIAL	 This Plan clearly sets out the final extraction limit as 85% of estimated recharge. While detailed assessment of groundwater dependent ecosystems was not undertaken, preliminary studies suggest that there may not be significant groundwater dependent ecosystems in this groundwater source. This Plan provides for the extraction limit to be reviewed by 30 June 2010 and the extraction limit revised by up to 20%.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon	FULL	• Rules set out in Part 9.
Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes	HIGH	 While detailed assessment of groundwater dependent ecosystems was not undertaken, preliminary studies suggest that there may not be significant groundwater dependent ecosystems in this area and the Lower Gwydir is a losing river. This Plan prohibits new or replacement extraction bores within 200 metres of any designated high priority dependent groundwater ecosystems and 100 metres for basic

		rights bores, but these are not likely to be identified before 30 June 2010. This Plan recognises the Minister's right to take action to prevent local groundwater level declines, groundwater quality impacts, and to protect aquifer integrity. This Plan provides for an assessment of groundwater dependency and variation in environmental health water by up to 20% before 30 June 2010.
Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components	HIGH	 This Plan establishes a transparent extraction limit and water allocation account rules. This Plan embargos new licence applications. Access rights are tradeable. The local extraction rules means that future rights will not be exclusive but affected by the future location of works. Licences with existing bores will have priority over licences requiring new bores.
Target 6a For groundwater sources, the total volume of water specified on access licences reduced over the term of a water sharing plan to no more than 125 percent of the Sustainable Yield	FULL	The total aquifer access licence share components for this groundwater source will be reduced to 100% of the final extraction limit at the commencement of this Plan.
Target 10 Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable baseflows to the river to be maintained or improved	HIGH	 While detailed assessment of connectivity was not undertaken, preliminary information suggests that the aquifer gains water from the Lower Gwydir River and the river is not therefore dependent on any groundwater baseflow. The top end of the Gwydir regulated river around Gravesend is a gaining river but with low dependency on groundwater baseflows. Groundwater extraction should not have significant impacts on discharges to the river and creeks.
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	 While detailed assessment of groundwater dependent ecosystems was not undertaken, preliminary studies suggest that there may not be significant groundwater dependent ecosystems in this groundwater source. This Plan prohibits new or replacement extraction bores within

		 200 metres of any designated high priority dependent groundwater ecosystems and 100 metres for basic rights bores, but these are not likely to be identified before 30 June 2010. This Plan provides for an assessment of groundwater dependency and variation in environmental health water by up to 20% before 30 June 2010.
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 basic domestic and stock requirements. It also protects domestic and stock bores from interference from higher yielding bores.
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	PARTIAL	1 Aboriginal community representative has been involved in development of this Plan.
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	 No Aboriginal cultural or traditional sites or requirements have been identified. This Plan includes a general objective for protection of cultural values. This Plan prohibits new or replacement extraction bores within 200 metres of any designated high priority dependent groundwater ecosystems and 100 metres for basic rights bores, but these are not likely to be identified before 30 June 2010.
Target 16a All share components of access licences tradeable	HIGH	Aquifer access licence share components and water allocations are tradeable.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	FULL	This Plan does not establish zones but does restrict transfers into the areas covered by the Gwydir Watercourse Plan of Management.
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the	HIGH	 This Plan includes a general water quality objective. This Plan establishes rules to protect water quality. This Plan is explicit about the beneficial uses and criteria.

recommendations of relevant Healthy Rivers Commission Inquiries		
Target 38 Aquifer water quality vulnerability zones mapped and extraction limits reviewed to reduce the risk of lateral intrusion of poor quality water	PARTIAL	 No vulnerability mapping of area is referenced. This Plan provides rules for managing lateral movement of poor quality water.

[29] Schedule 4 Special access licence rules and conditions

Omit the schedule. Insert instead:

Schedule 4 Special access licence rules and conditions

1 General

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

2 Additional annual accounting for water extraction rules

- (1) In any one water accounting year, subject to local impact management restrictions arising from Part 10, Division 3 of this Plan, water taken from this groundwater source under an aquifer access licence listed in this Schedule may not exceed a volume equal to 41.2 ML per unit of share component.
- (2) Total water in a water allocation account of an access licence listed in this Schedule at any time may not exceed a volume equal to 42.2 ML per unit of share component.

(3) A maximum amount equal to 42.2 ML per unit of share component may be carried forward in a water allocation account of an access licence listed in this Schedule, from one water accounting year to the next.

3 Additional mandatory conditions

The aquifer access licences listed in this Schedule shall have mandatory conditions in relation to the following:

- (a) water may only be taken if the available water determination for regulated river (high security) access licences in the Gwydir Regulated River water source is less than 1 ML per unit of share component,
- (b) water may only be taken if there is no allocation remaining in the water allocation account of licence number WAL8966 granted under the Water Management Act 2000, and any regulated river (high security) access licence arising from this at the commencement of Part 2 of Chapter 3 of the Act, unless the Water Sharing Plan for the Gwydir Regulated River Water Source 2002 is suspended under section 60(2) of the Water Management Act.
- (c) water may not be taken in any water year that the licence specified in subclause (3) (b) has been or is subject to a dealing under sections 71Q, 71R, 71S, 71W, or 71T of the Act, and that dealing results in the assignment of access rights or water allocations from the licence specified in subclause (3) (b), or the nomination of a water supply work at a location other than that specified on the licence, and
- (d) notwithstanding clause 2 of this Schedule, the total water that may be taken in a water accounting year under this access licence, and the regulated river (high security) access licence specified in subclause (3) (b), shall not exceed 13,325 megalitres, plus any water allocations assigned to these access licences in that year.

[30] Insert new schedule:

Schedule 6 Aquifer access licence share component

(Clauses 25C (2) and 25C(3))

Column 1	Column 2	Column 3
Water Act Entitlement	Licence	Aquifer Access Licence Share Component
90PT980064	90BL021579, 90BL153751	84
90PT980125	90BL123547	178
90PT980177	90BL250365	134
90PT982174	90BL016804, 90BL021748	157
90PT982642	90BL009410, 90BL251556	259

[31] Appendix 5 Minister's access licence dealing principles

Omit the appendix. Insert instead:

Appendix 5 Rules for determining History of Extraction

(Clause 25C (4))

Rule 1

The history of extraction for each entitlement is calculated separately, irrespective of ownership.

Rule 2

When meter failure has prevented the measurement of actual extraction, extraction will be estimated on the basis of:

- a) the extraction that was estimated at the time of meter failure held on record by the Department, or
- b) pump running times held on record by the Department, or
- c) areas of crops grown and water usage for similar crops.

Rule 3

Estimates made under Rule 2 will be capped at licensed access to water for the entitlement for the year in question.

Rule 4

Where non-volumetric entitlement have been converted to volumetric entitlement during or after the period being used to calculate HOE, any relevant historical extraction or other data used in converting the entitlements will be used to calculate HOE.

Rule 5

In the event of zero or reduced extraction resulting from bore failure the year in which the bore failed will be excluded in calculating HOE.

If a licence holder substantiates a case that the failure of a bore had a greater impact on extraction in the water year following bore failure, then this year rather than the year in which the failure occurred, will be the year excluded.

The licence holder must provide documented evidence of the bore failure.

Rule 6

Failure of associated bore equipment (eg motor, gearbox etc) will not be considered bore failure for the purpose of calculating HOE.

Rule 7

Reduced levels of extraction from a bore due to lower aquifer levels will not be considered bore failure for the purpose of determining HOE.

Rule 8

In the event of lower extraction resulting from crop failure no allowance will be made in calculating the HOE.

Rule 9

Water extracted pursuant to a temporary transfer of entitlement will be accounted in the HOE of the seller or transferor.

Rule 10

Where properties have been amalgamated, all extraction prior to amalgamation will be combined and together with extraction occurring after amalgamation will be used to calculate HOE.

Where entitlement is subdivided extraction under the original entitlement is allocated to the new entitlements.

Rule 11

When new entitlements have been created due to subdivision, extractions under the original entitlement will be apportioned to each new entitlement in proportion to the entitlement at the commencement of the plan and together with extraction occurring after subdivision will be used to calculate HOE.

Alternately, where all the new entitlement holders unanimously agreed, extraction under the original entitlement will be calculated for each bore licence and together with extraction occurring after the subdivision will be used to calculate HOE.

Rule 12

Where extractions have not been metered extraction will be assessed on the basis of (in priority order):

- a) any relevant historical extraction data used in converting non volumetric entitlement to volumetric entitlement;
- b) recorded pump usage hours if available, and
- c) areas of crops grown and water usage for similar crops each year.

Rule 13

Where an entitlement holder is unable to or does not provide information on which to base an assessment for a year the extraction for that year will be will be assessed as zero megalitres.

Rule 14

All extractions that a licence holder 'carried over' and/or 'borrowed' that were in accordance with management rules applying at the time will be included as extraction for determining history of extraction.

Rule 15

Metered extraction will first be allocated to:

- a) groundwater only extraction capped at the allocation for that year, then;
- b) conjunctive groundwater allocation (where applicable) capped at the conjunctive groundwater entitlement for that year, then;
- c) carry over within management rule limits and then;
- d) borrowing within management rule limits.

The sum of extraction from groundwater only entitlement, conjunctive groundwater entitlement, carryover & borrowing provision and temporary transfers will be used to calculate the HOE. Any remaining extraction will not be used to calculate HOE.

Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003 Amendment Order 2006

under the

Water Management Act 2000

Pursuant to section 45(1) of the *Water Management Act 2000*, I, the Minister for Natural Resources, make the following Order.

Dated this twenty fifth day of September 2006.

IAN MACDONALD, MLC, Minister for Natural Resources

Explanatory Note

This Order amends the *Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003 Order* as published in Government Gazette of 26 February 2003 as amended.

Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003 Amendment Order 2006

1. Name of Order

This Order is the *Water Sharing Plan for the Lower Macquarie Groundwater Sources Amendment Order* 2006.

2. Commencement

This Order commences on 1 October 2006.

3. Amendment of Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003

The Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003 is amended as set out in Schedule 1.

Schedule 1 Amendments

[1] Clause 3

Omit the clause. Insert instead:

3 Date of commencement

This Plan takes effect on 1 October 2006 and ceases on 30 June 2017.

[2] Clause 4 (1)

Omit the clause. Insert instead:

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

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

Note. Maps referred to in this Plan may be inspected at the Department's offices listed in Appendix 2.

[3] Subclause 12(d)

Omit the subclause. Insert instead:

(d) reduce the total share component of access licences to the final extraction limit,

[4] Clause 16

Omit the clause. Insert instead:

16 Recharge

- (1) The overall basis for water sharing in this Plan is the average annual recharge to each groundwater source as follows:
 - (a) 25,500 megalitres per year (here after ML/yr) plus the requirements for basic landholder rights at the commencement of this Plan in Zone 1,
 - (b) 26,600 ML/yr plus the requirements for basic landholder rights at the commencement of this Plan in Zone 2,
 - (c) 11,000 ML/yr plus the requirements for basic landholder rights at the commencement of this Plan in Zone 3,
 - (d) 6,000 ML/yr plus the requirements for basic landholder rights at the commencement of this Plan in Zone 4.
 - (e) undefined in Zone 5, and
 - (f) 9,600 ML/yr plus the requirements for basic landholder rights at the commencement of this Plan in Zone 6.
- (2) A review of recharge for each groundwater source should be undertaken by the Minister by 30 June 2008 of this Plan, that should:
 - (a) recommend an average annual recharge for Zone 5, and
 - (b) recommend any changes to the average annual recharge for Zones 1, 2, 3, 4 and 6.
- (3) The Minister may under section 45 (1) (b) of the Act amend subclause (1) after 30 June 2010 to vary the average annual recharge values for each of these groundwater sources, following the review undertaken in subclause (2) and this variation should:
 - (a) establish the average annual recharge in Zone 5, and
 - (b) revise the estimated average annual recharge for each of Zones 1, 2, 3, 4 and 6.
- (4) The Minister should undertake a second review of the average annual recharge for each groundwater source by the 30 June 2014.
- (5) The Minister may under section 45 (1) (b) of the Act amend subclause (1) after 30 June 2015 to vary the average annual recharge values for each of these groundwater sources, following the second review undertaken in subclause (4).

[5] Clause 18 Environmental health water

Omit the clause. Insert instead:

18 Planned environmental water

Note. It is anticipated that the planned environmental water provisions in this Part and management of local impact provisions in Part 10, Division 3 of this Plan will also protect the cultural and spiritual values of groundwater (see clause 11 (e)).

- (1) This Plan establishes the following planned environmental water rules:
 - (a) subject to Part 10 Division 2 of this Plan, the physical water contained in the storage component of these groundwater sources, minus the amount required for supplementary water access permitted under clause 25D, as varied by clause 29 will be reserved for the environment.
 - (b) subject to Part 10 Division 2 of this Plan, 15% of an amount that is equal to the average annual recharge to these groundwater sources, excluding Zone 5,

minus basic landholder rights at the commencement of this Plan, is reserved for the environment and Aboriginal cultural heritage.

Note. Access to water under supplementary water access licences in these groundwater sources will not be permitted after the 30 June 2016 and the physical water contained in the storage component of these groundwater sources plus 15% of the long-term average annual recharge of these groundwater sources minus an amount for basic landholder rights requirements at the commencement of this Plan will be reserved for the environment.

- (2) A review of the proportion of recharge in subclause (1)(b) reserved as planned environmental water in these groundwater sources using the best available science should be undertaken by the Minister after 30 June 2008 and should:
 - (a) recommend the proportion of the annual recharge to be reserved for the environment and Aboriginal cultural heritage in Zone 5,
 - (b) recommend any change to the proportion of the annual average recharge to be reserved for the environment and Aboriginal cultural heritage in each of Zones 1, 2, 3, 4 and 6, and
 - (c) identify groundwater dependent ecosystems, establish their groundwater requirements and recommend appropriate management options to protect them.

Note: The studies may recommend management options other than reservation of a portion of recharge to protect groundwater dependant ecosystems.

- (3) The Minister may under section 45 (1) (b) of the Act, amend subclause (1) (b) after 30 June 2010 to vary the proportion of recharge reserved as planned environmental water in each of these groundwater sources, based on the review undertaken in subclause (2), and this variation should:
 - (a) establish the proportion of the annual average recharge to be reserved for the environment and Aboriginal cultural heritage in Zone 5,
 - (b) if required, change the proportion of the annual average recharge to be reserved for the environment and Aboriginal cultural heritage in each of Zones 1, 2, 3, 4 and 6, and
 - (c) designate further high priority groundwater dependent ecosystems, and include them in Schedule 4.
- (4) The Minister should undertake a second review of the proportion of the average annual recharge reserved as planned environmental water in each groundwater source, by 30 June 2014.
- (5) The Minister may under section 45 (1) (b) of the Act, amend subclause (1) after 30 June 2015 to vary the proportion of the average annual recharge reserved as planned environmental water, as varied by subclause (3), following a review established in subclause (4).
- (6) The Minister shall cause to have undertaken an independent evaluation of the reviews established in subclauses (2) and (4) prior to any change to this Plan in accordance with subclauses (3) and (5).
- (7) The Minister should seek advice from the Water Management Committee, or in its absence an advisory committee established by the Minister, including, where

possible, representatives of domestic and stock rights and groundwater users, local water utilities, irrigation and industry, Aboriginal persons and environment groups before making any changes to this Plan under subclauses (3) and (5).

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

(8) Any change in planned environmental water arising from subclauses (3) and (5) shall not result in the proportion of recharge reserved for the environment being less than 10%, or greater than 30% in any groundwater source.

[6] Clause 19 Supplementary environmental water

Omit the clause.

[7] Clause 20 Adaptive environmental water

Omit the clause. Insert instead:

20 Adaptive environmental water

- (1) Water may be committed in these groundwater sources for environment purposes by an adaptive environmental water condition pursuant to section 8B of the Act.
- (2) The holder of an access licence may request that the Minister impose an adaptive environmental water condition in respect of the whole or a part of the share component of the access licence.
- (3) The condition imposed under subclause (2) will continue until the holder requests its removal.
- (4) An access licence may be held by the Minister, a catchment management authority or other public body to the extent that the whole or part of that access licence has been surrendered as a result of on farm water savings made by works or other improvements, subject to:
 - (a) the share component of the access licence held being equal to the value of the on-farm water savings made,
 - (b) the access licence held being the highest priority category in these groundwater sources, other than a specific purpose category, and
 - (c) an adaptive environmental water condition being imposed on the access licence and that condition not being removed.
- (5) The adaptive environmental water condition specified in subclause (1) and the plan for implementation of that condition, as required by section 8E(7) of the Act:
 - (a) are to be established by the Minister, and
 - (b) shall be such as to ensure that there will be a contribution to the objectives of this Plan
- (6) The allocation of water for access licences with an adaptive environmental water condition will be in accordance with the available water determination for the relevant category of access licence under this plan.

- (7) If the adaptive environmental water condition on an access licence requires the water to be left in the water source for environmental purposes, then the water allocation account is to be debited when the water is available in accordance with the adaptive environmental water condition on the access licence.
- (8) If the adaptive environmental water condition requires the environmental water to be taken from the water source then the water allocation account is to be debited when it is taken.
- (9) For the purposes of auditing compliance with the extraction limit under this plan, the delivery of water pursuant to an access licence that has been committed as adaptive environmental water shall be accounted for as extraction where it occurs pursuant to a licence under subclause (2) or subclause (4).
- (10) To the extent that the water allocation of an access licence which is subject to an adaptive environmental water condition is not required to meet the requirement of the condition it may be the subject of an assignment dealing in accordance with the Dealings Rules in this plan.
- (11) Notwithstanding subclause (10) an access licence with an adaptive environmental water condition may be the subject of any other dealing permitted by the Dealing Rules in this plan, provided the benefit to the environment provided for in the adaptive environmental condition is not diminished.
- (12) At the commencement of this clause, there were no access licences with an adaptive environmental water condition in these groundwater sources.

[8] Clause 21 Basic landholder rights

Omit the clause. Insert instead:

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 Minister may amend a water supply works approval to allow the landholder's affected bore to be replaced or deepened to ensure continuing access to water for basic landholder rights, or
 - (b) the Minister may amend another water supply works approval so that basic rights water may be supplied by an alternative water supply work during critical times.
- (3) In accordance with the legislative requirements, 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).
- (4) Basic landholders rights exercised under section 52 of the Act must be exercised in accordance with any guidelines established by the Minister with respect to the reasonable use of water for domestic consumption and stock watering by landholders authorised to use water for either or both of those purposes.

Note. The Minister may, by order made under section 323 of the Act, impose temporary restrictions on basic landholder rights when it is necessary to do so in the public interest, such as to cope with a water shortage or threat to public health or safety.

Note. The Minister may enforce any reasonable use guidelines by serving orders on individual landholders under section 325 of the Act. The Minister may also order individual landholders accessing basic landholder rights to take specified measures to protect the environment, to preserve basic landholder rights or to overcome a threat to public health under section 328 of the Act.

[9] Clause 25 Estimate of water requirements

Omit the clause. Insert instead:

25 Requirements for water under access licences

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

Note. The amount of water specified in this Part represents the total volumes or total shares specified in the share components on access licence in these groundwater sources. The actual volume of water available at any time will depend on climate, access licence priority and the rules in this Plan.

[10] Insert the following after clause 25:

25A Share components of domestic and stock access licences

It is estimated that at the time of commencement of this Plan, the share components of domestic and stock access licences authorised to extract water from these groundwater sources will total 0 ML/yr.

25B Share components of local water utility access licences

It is estimated that at the time of commencement of this Plan, the share components of local water utility access licences authorised to extract water from these groundwater sources will total 3,093 ML/yr, distributed as follows:

- (a) 2,000 ML/yr in Zone 1,
- (b) 1,090 ML/yr in Zone 3, and
- (c) 3 ML/yr in Zone 6.

25C Share components of aquifer access licences

- (1) For Water Act 1912 entitlements in Zone 5 and Zone 6 that are to become aquifer access licences at the commencement of this Plan, the share component is to be equal to the Water Act 1912 entitlement.
- (2) For each entitlement referred to in Column 1 of Schedule 5 applying to the licences listed in Column 2 of Schedule 5 that are to become aquifer access licences in these groundwater sources at the commencement of this Plan, the share component is to be equal to the share component in Column 3 of Schedule 5.
- (3) For those Water Act 1912 entitlements in Zone 1, Zone 2, Zone 3, and Zone 4 that are to become aquifer access licences at the commencement of this Plan, the share component will be established in accordance with the following formula individually for each of these Zones:

$$SC_{AAL} = (AE/\sum AE) \times (R - PEW - LWU - SD - \sum SC)$$

where:

- (a) SC_{AAL} is the share component of the aquifer access licence,
- (b) AE is the weighted entitlement calculated from the following formula:

$$AE = (HOE \times AR) + ((WAE - HOE) \times (1-AR))$$

where:

- (i) HOE is as defined in subclause (3),
- (ii) AR is 0.69 in Zone 1, 0.72 in Zone 2, 0.77 in Zone 3 and 0.76 in Zone 4,
- (iii) WAE is the Water Act 1912 entitlement,
- (c) Σ AE is the total of all adjusted entitlements calculated under subclause (b),
- (d) R is the amount of recharge established in clause 16 (1) for each respective Zone,
- (e) PEW is the volume of recharge reserved as planned environmental water in clause 18 (1) for each respective Zone
- (f) LWU is the total of local water utility access licence share components for the respective Zone at the commencement of this Plan,
- (g) SD is the total of domestic and stock access licences for the respective Zone at the commencement of the Plan, and
- (h) \sum SC is the sum of share components specified in Column 3 of Schedule 5.
- (4) For the purposes of subclause (3) and clause 25D HOE, if the maximum water extraction in any one year during the period from 2000/01 to 2002/03 was less than or equal to 150% of the maximum water extracted in either 1998/99 or 1999/00, or was less than or equal to 50 ML, then the HOE will be the average metered extraction from 1998/99 to 2002/03 excluding zero and low extraction years since activation.
- (5) For the purposes of subclause (3) and clause 25D HOE, if the maximum water extraction in any one year during the period from 2000/01 to 2002/03 was greater than 150% of the maximum water extracted in either 1998/99 or 1999/00, and was more than 50 ML, then the HOE will be calculated from the following formula:

$$HOE = (2001/02 \text{ extraction} + (2 \times 2002/03 \text{ extraction}))/3$$

Note. The rules for determining HOE are contained in Appendix 4.

(6) For the purposes of subclauses (4) and (5) zero and low extraction years are years where extraction was less than 20% of the maximum volume of water extracted in any one year up to and including the 2001/02 water year.

- (7) For the purposes of subclauses (4) and (5) activation is defined as the first year up to and including the 2001/02 water year in which a licence holder extracted 20% or more of the maximum volume of water extracted in any one year between 1995/96 and 2001/02.
- (8) It is estimated that at the time of commencement of this Plan, the share components of aquifer access licences authorised to extract water from theses groundwater sources will total 65,524 ML/yr, distributed as follows:
 - (a) 19,675 ML/yr in Zone 1,
 - (b) 22,610 ML/yr in Zone 2,
 - (c) 8,260 ML/yr in Zone 3,
 - (d) 5,100 ML/yr in Zone 4,
 - (e) 2,398 ML/yr in Zone 5, and
 - (f) 7,481 ML/yr in Zone 6.

25D Share components of supplementary water access licences

- (1) Those Water Act 1912 entitlements that are to be converted to an aquifer access licence in these groundwater sources under clause 25C (3) may also receive a supplementary water access licence.
- (2) The share component of a supplementary water access licence converted under subclause (1) will established in accordance with the following formula:

$$SC_{SWAL} = HOE - SC_{AAL}$$

where:

- (a) HOE is as defined in subclauses 25C (4), (5), (6) and (7).
- (b) SC_{AAL} is the share component of the aquifer access licence established under clause 25C (2).
- (c) SC_{SWAL} is the share component for the supplementary water access licence.

Note: Not all aquifer access licences amended under clause 25C (3) will receive a supplementary water access licences. Only those licences who have a HOE as defined in subclause (2) which is greater than their new aquifer access licence share component.

- (3) It is estimated that at the time of commencement of this Plan the sum of supplementary water access licences established under subclauses (1) for these groundwater sources will total 2,399 ML and distributed as follows;
 - (a) 1,172 ML for Zone 1
 - (b) 395 ML for Zone 3
 - (c) 832 ML for Zone 4

25E Changes to share components

- (1) This Plan recognises that the total requirements for water for extraction within these groundwater sources may change during the term of this Plan as a result of:
 - (a) the granting, surrender or cancellation of access licences, or
 - (b) the variation of local water utility access licences under section 66 of the Act.
- (2) Pursuant to section 68A of the Act the share component of each supplementary water access licence in these groundwater sources will be reduced to 0 ML on 1 July 2015.
- (3) Pursuant to section 77A of the Act supplementary water access licences will be cancelled after 1 July 2015.

[11] Clause 26 Rules for granting access licences

Omit the clause. Insert instead:

26 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b), 61 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) Applications for access licences may be made and access licences granted in these groundwater sources if they are for:
 - (a) a specific purpose access licence for which application is provided for under clause 19 of the Water Management (General) Regulation 2004 (hereafter *the Regulation*) in accordance with section 61 (1) (a) of the Act,

Note. At the commencement of this Plan, clause 19 of the Regulation provides for the following specific purpose access licences to be applied for:

- (a) a local water utility access licence (subcategory "domestic and commercial"), for the purpose of domestic consumption and commercial activities,
- (b) a domestic and stock access licence (subcategory "domestic"), for the purpose of domestic consumption,
- (c) an aquifer access licence (subcategory "town water supply"), for the purpose
 of supply to communities for domestic consumption and commercial activities,
 and
- (d) any category of specific purpose access licence (subcategory "Aboriginal cultural"), for Aboriginal cultural purposes.

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

(b) an access licence with a zero share component in accordance with sections 61 (1) (b) and 63 (5) of the Act,

- (c) an access licence that may be granted in accordance with a dealing that is permitted by Part 11 of this Plan,
- (3) 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.
- (4) 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 3 of this Plan.
- (5) An access licences may be granted in these groundwater sources where:
 - (a) a Water Act 1912 licence was not converted at the commencement of this plan, or
 - (b) a licence is found to be taking water from a water source in this plan but has been incorrectly identified as taking of water from another groundwater source and the licence is cancelled in the other water source.
- (6) Aquifer access licences granted under subclause (5) shall be subject to the rules specified in clauses 25C and 25D.

[12] Clause 27 Long-term average extraction limits

Omit the clause. Insert instead:

27 Extraction limits

- (1) This Division is made in accordance with section 20 (2) (a) of the Act.
- (2) The extraction limit for each groundwater source, except Zone 5, is the recharge established in clause 16, minus the proportion of recharge reserved as planned environmental water in clause 18, plus total water allocations made to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan and is as follows:
 - (a) 21,675 ML/yr, plus total water allocations made to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan in Zone 1,
 - (b) 22,610 ML/yr plus total water allocations made to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan in Zone 2,
 - (c) 9,350 ML/yr plus total water allocations made to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan in Zone 3,
 - (d) 5,100 ML/yr plus total water allocations made to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan in Zone 4, and

- (e) 8,160 ML/yr plus the total requirements for basic landholder rights at the commencement of this plan in Zone 6.
- (3) For Zone 5, until the average annual recharge and the proportion of recharge reserved for the environment are established under clauses 16(3) and 18(3), the extraction limit is taken to be 2,398 ML/yr, plus basic landholder rights being the requirements for water at the commencement of this plan identified in clause 25(2).
- (4) For Zone 5, after the average annual recharge and the proportion of recharge reserved for the environment are established under clauses 16(3) and 18(3), the extraction limit will be the recharge minus the proportion of recharge reserved for the environment plus basic landholder rights.

[13] Clause 28 Variation of the long-term extraction limits

Omit the clause. Insert instead:

28 Variation of extraction limits

- (1) The Minister may under section 45 (1) (b) of the Act amend clause 27 after 30 June 2010 to vary the extraction limits in accordance with:
 - (a) any change to the average annual recharge arising from clause 16 (3), or
 - (b) any change to the planned environmental water arising from clause 18 (3).
- (2) If there is any change to the extraction limits arising from subclause (1) then:
 - (a) in Zone 1 the extraction limit will not be more than 27,540 ML/yr plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan, and will not be less than 16,065 ML/yr plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan,
 - (b) in Zone 2 the extraction limit will not be more than 28,730 ML/yr plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan, and will not be less than 16,760 ML/yr plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan,
 - (c) in Zone 3 the extraction limit will not be more than 11,880 ML/yr plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan, and will not be less than 6,930 ML/yr plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan,
 - (d) in Zone 4 the extraction limit will not be more than 6,480 ML/yr plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan, and will not be less than 3,780 ML/yr plus total

- water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan,
- (e) in Zone 5 the extraction limit will not be less than 2,398 ML/yr plus the total requirements for basic landholder rights at the commencement of this plan, and
- (f) in Zone 6 the extraction limit will not be more than 10,370 ML/yr plus the total requirements for basic landholder rights at the commencement of this plan, and will not be less than 7,340 ML/yr plus the total requirements for basic landholder rights at the commencement of this plan.
- (3) The Minister may under section 45 (1) (b) of the Act amend clause 27 after 30 June 2015 to vary the extraction limits in accordance with:
 - (a) any change to the average annual recharge arising from clause 16 (5), and
 - (b) any change to the planned environmental water arising from clause 18 (5).
- (4) If there is any change to the extraction limits arising from subclause (3) then:
 - (a) in Zone 1 the extraction limit will not be less than 16,065 ML/yr plus basic landholder rights,
 - (b) in Zone 2 the extraction limit will not be less than 16,760 ML/yr plus basic landholder rights,
 - (c) in Zone 3 the extraction limit will not be less than 6,930 ML/yr plus plus basic landholder rights,
 - (d) in Zone 4 the extraction limit will not be less than 3,780 ML/yr plus basic landholder rights,
 - (e) in Zone 5 the extraction limit will not be less than 2,398 ML/yr plus basic landholder rights, and
 - (f) in Zone 6 the extraction limit not be less than 7,340 ML/yr plus basic landholder rights.

[14] Insert the following clause after clause 28:

28A Compliance with extraction limits

- (1) Water extraction in these groundwater sources will be monitored each water year to determine if there is any growth in volume extracted above the extraction limit specified in clause 27 as amended by clause 28, based a comparison of the extraction limit against the average extraction within each groundwater source over that year and the preceding 2 years.
- (2) For the purposes of auditing compliance with the extraction limit, if water that:
 - (a) pursuant to an access licence is committed as adaptive environmental water to be left in the aquifer for environmental purposes, then extraction will be assumed to be equal to 100% of the available water determination made under clause 29, or

- (b) pursuant to an access licence is committed as adaptive environmental water to be extracted for environmental purposes, then extraction will be that measured through the approved water supply work (bore).
- (3) If the 3 year average of extraction in a groundwater source in this Plan exceeds the extraction limit established in clause 27 by 5% or greater, then the available water determination made for aquifer access licences under clause 29 (6) and clause 29(7) for the following water year, should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the extraction limit for that groundwater source,

[15] Clause 29 Available water determinations

Omit the clause. Insert instead:

29 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) Pursuant to section 58(4) of the Act, this Plan amends the relative priorities of the categories of aquifer access licence and supplementary water access licence to the extent necessary to legally make the available water determinations set out in this clause.
- (3) All available water determinations in these groundwater sources shall be expressed as either:
 - (a) a percentage of the share component for all access licences where share components are specified as megalitres per year, or
 - (b) megalitres per unit of share component for all access licences where share components are specified as a number of shares.
- (4) An available water determination for each category of access licence in these groundwater sources should be made at the commencement of each water year.
- (5) The available water determinations made at the commencement of the water year for domestic and stock and local water utility access licences should be 100% of share components.
- (6) The available water determination made at the commencement of the water year for aquifer access licences should be such that the total of available water determinations for each water source under this clause equals the extraction limit for the water source set in clause 27 (2) as varied by clause 28(2) minus the total requirements for basic landholder rights, minus the total available water determinations for domestic and stock and local water utility access licences and supplementary water access licences, or such lower amount as results from the operation of clause 28A (3) or subclause (7).
- (7) The available water determination for all aquifer access licences in Zone 5 and Zone 6 will not exceed 1 ML per unit of share component.
- (8) The available water determination made at the commencement of this plan for supplementary water access licences should be 0.9 ML per unit of share component.

- (9) The available water determination made at the commencement of each water year after the 2006/07 water year for supplementary water access licences will be reduced by a further 0.1 ML per unit of share component.
- (10) The available water determination for supplementary water access licences will be reduced to 0 ML per unit of share component at the commencement of the 2015/16 water year.

Note. Subclause (8) means that allocations for supplementary water access licences will diminish each year by 0.1 ML per unit share. For example, the available water determination for the 2006/07 water year is 0.9, the 2007/08 water year is 0.8, the 2008/09 water year is 0.7, the 2009/10 water year is 0.6, the 2010/11 water year is 0.5, the 2011/12 water year is 0.4, the 2012/13 water year is 0.3, 2013/14 water year is 0.2, the 2014/15 water year is 0.1, and the 2015/16 water year is 0.

[16] Note following clause 32

Omit the note. Insert instead:

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

[17] Clause 34 Annual accounting for water extraction

Omit the clause. Insert instead:

34 Annual accounting for water extraction

- (1) Water taken from these groundwater sources will be accounted for at least annually.
- (2) Water taken by a water supply work (bore) nominated by an access licence will be periodically debited against the access licence water allocation account.
- (3) A water allocation account shall remain at or above zero at all times.
- (4) Unused water allocations in the water allocation accounts of domestic and stock access licences or of local water utility access licences, cannot be carried over from one water year to the next.
- (5) In any water year, subject to local impact management restrictions arising from Part 10, Division 3 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 equal to:
 - (a) 100% of the share component of the access licence,
 - (b) plus any water allocations assigned from another access licence under section 71T 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 71T of the Act in that year.

- (6) Unused water allocations in the water allocation accounts of aquifer access licence may be carried over from one water year to the next, subject to subclause (7).
- (7) The maximum amount of unused water allocations that can be carried over under subclause (6) is equal to 0.62 ML per unit of share component.
- (8) In any water 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 that is equal to:
 - (a) 1.44 ML per unit of aquifer access licence share component.
 - (b) plus any water allocations assigned from another access licence under section 71T of the Act in that year, and
 - (c) minus any water allocations assigned to another access licence under section 71T of the Act in that year.
- (9) Total water in any aquifer access licence water allocation account at any time may not exceed a volume consisting of:
 - (a) 1.62 ML per unit of aquifer access licence share component,
 - (b) plus any water allocations assigned from another licence under section 71T of the Act in that year,
 - (c) minus any water allocations assigned to another licence under section 71T of the Act in that year.

[18] Clause 39 (3)

Omit the clause. Insert instead:

(3) The Minister may under section 45 (1) (b) identify further high priority groundwater dependent ecosystems and include them in Schedule 4 at the end of the 2009/10 water year and at the end of the 2014/15 water year, based on further studies of groundwater ecosystem dependency undertaken by the Minister.

[19] Clause 44 Access licence dealing rules

Omit the clause. Insert instead:

44 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted under section 71Z of the Act.
- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71L of the Act and the rules in this Part.

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

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71Z of the Act provides for the Minister's access licence dealing principles to prevail.

[20] Clause 45 (1)

Omit the clause. Insert instead:

(1) This clause applies to any relevant dealings under sections 71Q, 71S, and 71W of the Act, and section 71T of the Act with respect to allocation assignments within these groundwater sources.

[21] Clause 46 Rules for change of water source

Omit the clause. Insert instead:

46 Rules for change of water source

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

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

- (2) Dealings under section 71R of the Act that change the water source to which an access licence applies are prohibited in these groundwater sources.
- (3) An access licence with a share component specifying one of these groundwater sources may be cancelled and a new licence issued specifying another of these groundwater sources only if the total share components of all access licences in the groundwater source in which the access licence is issued remains below the extraction limit for that groundwater source established in clause 27, as amended in clause 28.
- (4) Notwithstanding subclause (3), a new licence specifying Zone 3, 4 or 5 may not be issued following cancellation of an access licence in Zone 1, 2, or 6.
- (5) The volume of the share component on an access licence issued under this clause is to be the volume of the cancelled access licence share component.

[22] Clause 47 (1)

Omit the clause. Insert instead:

(1) This clause relates to dealings under section 710 of the Act.

[23] Clause 48 (1)

Omit the clause. Insert instead:

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

[24] Clause 49 (1)

Omit the clause. Insert instead:

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

[25] Clause 50 (1)

Omit the clause. Insert instead:

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

[26] Clause 52 (2)

Omit the clause. Insert instead:

(2) All supplementary water access licences shall have mandatory conditions to give effect to clause 25E (2) and (3), in relation to the amendment of access licence share components.

[27] Clause 54 Monitoring

Omit the clause. Insert instead:

54 Monitoring

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

Note. Review and Audit of this Plan

In accordance with section 43A of the Act, the Natural Resources Commission must undertake a review of this Plan prior to any decision to extend its term or to make a new plan. The review must consider the extent to which the Plan's water sharing provisions have contributed to achieving or not achieving the relevant natural resource management standards and targets in the catchment management area (as referred to in section 5 of the Catchment Management Authorities Act 2003).

When undertaking this review the Natural Resources Commission is required to call for public submissions. The Commission will take into consideration any submission received as well as any other relevant State-wide or regional government policies or agreements that apply to the catchment management area.

In accordance with section 44 of the Act, this Plan will be audited at intervals of no more than five years, for the purpose of ascertaining whether its provisions are being given effect to. This audit is to be carried out by an audit panel appointed by the Minister in consultation with a water management committee where one exists.

Note. The Implementation Program

In accordance with section 51 of the Act, the Minister may establish an Implementation Program that sets out the means by which the provisions of this Plan are to be achieved.

It is proposed that the Minister establish an Implementation Program for this Plan. Pursuant to section 51 (5) of the Act, the implementation program is to be reviewed annually by the Minister to determine whether it is effective in implementing this Plan.

The results of the review of the Implementation Program will be included in the annual report for the Department of Natural Resources.

[28] Clause 55 Amendment of this Plan

Omit the clause. Insert instead:

55 Amendment of this Plan

- (1) This Part is made in accordance with section 45 (1) (b) of the Act.
- (2) This Plan can be amended in accordance with the following clauses of this Plan:

- (a) clause 16 in respect to the average annual recharge,
- (b) clause 18 in respect to planned environmental water,
- (c) clause 28 in respect to long-term average extraction limit,
- (d) clause 39 in respect to high priority groundwater dependent ecosystems and Aboriginal cultural heritage values.

[29] Schedule 1 Dictionary

Include the following:

long term average storage component is the volume of water in the aquifer less the combined average annual recharge and requirements for basic landholder rights at the commencement of this plan, and exceeds the requirements and supplementary water access provided for in this Plan.

water year is a 12 month period from 1 July to 30 June.

[30] Schedule 3 Contribution to target in the State Water Management Outcomes Plan

Omit the schedule. Insert instead:

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

Level of assessed contribution:

FULL – contributes to target in full

HIGH - while not fully contributing to target, there is a good level of contribution PARTIAL - goes some way to contributing to the target

LOW - only small degree of contribution to target

Relevant target	Level of contribution	Comments
Target 1e The long term average annual extractions for groundwater limited (or being phased down) to an ecologically sustainable level (the Sustainable Yield) as determined by detailed assessment of each groundwater source and consultation with the relevant management committee. In the absence of such an assessment, the following to apply: 100 percent of average annual recharge for a groundwater source where there is no significant ecosystem dependency; 70 percent of average annual recharge where there is significant ecosystem dependency	FULL	This Plan phases down extraction to 85% of recharge in each groundwater source.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are	FULL	• Rules set out in Part 9.

exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon		
Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes	HIGH	This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any designated high priority dependent groundwater ecosystems (Schedule 4 which nominates prior streams) or any creek or river. Part 10 sets out local impact management rules in response to local groundwater pressure or level declines, and groundwater quality impacts.
Target 5 Access rights for water access licensees clearly and legally specified in terms of share and extraction components	HIGH	 This Plan establishes transparent extraction limits and allocation/account rules. This Plan embargos new licence applications. Licences are tradeable. The local extraction rules means that future rights will not be exclusive but affected by the future location of works. Licences with existing bores will have priority over licences requiring new bores.
Target 6a For groundwater sources, the total volume of water specified on access licences reduced over the term of a water sharing plan to no more than 125 percent of the Sustainable Yield	FULL	By the end of the Plan total licence volumes are reduced to 100% of the sustainable yield.
Target 10 Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable baseflows to the river to be maintained or improved	PARTIAL	 There is little information currently available on connectivity. Baseflows should be partially protected by maintaining extraction within extraction limits and by prohibiting new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any creek or river.
Target 11 Groundwater dependent ecosystems identified and mapped for all	HIGH	Groundwater dependent ecosystems are listed in

priority aquifers, and the ecological water requirements assessed to enable local groundwater extraction rates and/or Sustainable Yields to be reviewed		 Schedule 4. They should be partially protected by maintaining extraction within extraction limits. This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any designated high priority dependent groundwater ecosystems (Schedule 4 which nominates only prior streams) or any creek or river. Part 10 sets out local impact management rules in response to local groundwater pressure or level declines, and groundwater quality impacts.
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 basic domestic and stock requirements. It also protects domestic and stock bores from interference from higher yielding bores.
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	PARTIAL	Aboriginal community representative has been involved in development of this Plan.
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	 No Aboriginal cultural or traditional sites or requirements have been identified. The environmental health provisions should protect dependent ecosystems of importance to Aboriginal people.
Target 16a All share components of access licences tradeable	FULL	Licence volumes and water allocations are tradeable.
Target 16e Any unassigned access rights identified and clear mechanisms	FULL	Rules for grant licences are established.

established for their future assignment		
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	HIGH	This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any designated high priority dependent groundwater ecosystems (Schedule 4 which nominates only prior streams) or any creek or river.
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries	HIGH	 This Plan includes a water quality objective, and establishes rules to protect water quality. This Plan is explicit about the beneficial uses and criteria.
Target 38 Aquifer water quality vulnerability zones mapped and extraction limits reviewed to reduce the risk of lateral intrusion of poor quality water	PARTIAL	 No vulnerability mapping of area is referenced in this Plan. This Plan includes rules for managing the impacts of extraction on water quality.

[31] Insert new schedule:

Schedule 5 Aquifer access licence share component

(Clauses 25C (2) and 25C(3))

Column 1 Water Act Entitlement	Column 2 Licence(s)	Column 3 Aquifer Access Licence Share Component
80PT970347	80BL118157, 80BL236966	1281
80PT970357	80BL126281	950
80PT970455	80BL022539	236
80PT970480	80BL012837	59

[32] Appendix 4 Minister's access licence dealing principles

Omit Appendix 4. Insert instead:

Appendix 4 Rules for determining History of Extraction

(Clause 25C (5))

Rule 1

The history of extraction for each entitlement is calculated separately, irrespective of ownership.

Rule 2

When meter failure has prevented the measurement of actual extraction, extraction will be estimated on the basis of:

- a) the extraction that was estimated at the time of meter failure held on record by the Department, or
- b) pump running times held on record by the Department, or
- c) areas of crops grown and water usage for similar crops.

Rule 3

Estimates made under Rule 2 will be capped at licensed access to water for the entitlement for the year in question.

Rule 4

Where non-volumetric entitlement have been converted to volumetric entitlement during or after the period being used to calculate HOE, any relevant historical extraction or other data used in converting the entitlements will be used to calculate HOE.

Rule 5

In the event of zero or reduced extraction resulting from bore failure the year in which the bore failed will be excluded in calculating HOE.

If a licence holder substantiates a case that the failure of a bore had a greater impact on extraction in the water year following bore failure, then this year rather than the year in which the failure occurred, will be the year excluded.

The licence holder must provide documented evidence of the bore failure.

Rule 6

Failure of associated bore equipment (eg motor, gearbox etc) will not be considered bore failure for the purpose of calculating HOE.

Rule 7

Reduced levels of extraction from a bore due to lower aquifer levels will not be considered bore failure for the purpose of determining HOE.

Rule 8

In the event of lower extraction resulting from crop failure no allowance will be made in calculating the HOE.

Rule 9

Water extracted pursuant to a temporary transfer of entitlement will be accounted in the HOE of the seller or transferor.

Rule 10

Where properties have been amalgamated, all extraction prior to amalgamation will be combined and together with extraction occurring after amalgamation will be used to calculate HOE.

Rule 11

When new entitlements have been created due to subdivision, extractions under the original entitlement will be apportioned to each new entitlement in proportion to the entitlement at the commencement of the plan and together with extraction occurring after subdivision will be used to calculate HOE.

Alternately, where all the new entitlement holders unanimously agreed, extraction under the original entitlement will be calculated for each bore licence and together with extraction occurring after the subdivision will be used to calculate HOE.

Rule 12

Where extractions have not been metered extraction will be assessed on the basis of (in priority order):

- a) any relevant historical extraction data used in converting non volumetric entitlement to volumetric entitlement;
- b) recorded pump usage hours if available, and
- c) areas of crops grown and water usage for similar crops each year.

Rule 13

Where an entitlement holder is unable to or does not provide information on which to base an assessment for a year the extraction for that year will be will be assessed as zero megalitres.

Rule 14

All extractions that a licence holder 'carried over' and/or 'borrowed' that were in accordance with management rules applying at the time will be included as extraction for determining history of extraction.

Rule 15

Metered extraction will first be allocated to:

- a) groundwater only extraction capped at the allocation for that year, then;
- b) conjunctive groundwater allocation (where applicable) capped at the conjunctive groundwater entitlement for that year, then;

The sum of extraction from groundwater only entitlement and conjunctive groundwater entitlement will be used to calculate the HOE. Any remaining extraction will not be used to calculate HOE.

Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003 Amendment Order 2006

under the

Water Management Act 2000

Pursuant to section 45(1) of the *Water Management Act 2000*, I, the Minister for Natural Resources, make the following Order.

Dated this twenty fifth day of September 2006.

IAN MACDONALD, MLC, Minister for Natural Resources

Explanatory Note

This Order amends the *Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003 Order* as published in the Government Gazette of 26 February as amended.

Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources Amendment Order 2006

1. Name of Order

This Order is the *Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources Amendment Order* 2006.

2. Commencement

This Order commences on 1 October 2006.

3. Amendment of Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003

The Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003 is amended as set out in Schedule 1.

Schedule 1 Amendments

[1] Clause 3

Omit the subclause. Insert instead:

3 Date of commencement

This Plan takes effect on 1 October 2006, and ceases on the 30 June 2017

[2] Clause 4 (2)

Omit the clause. Insert instead:

- (2) The groundwater sources referred to in this Plan are:
 - (a) the Lower Murrumbidgee Shallow Groundwater Source (hereafter *the Shallow Groundwater Source*), characterised by the Shepparton Formation, which is generally yellow and brown poorly sorted sand and clay sediments that extend to a depth of between 50 and 70 metres below the ground surface. The Shallow Groundwater Source extends to a depth of 40 metres, or the bottom of the Shepparton formation, whichever is the deeper and
 - (b) the Lower Murrumbidgee Deep Groundwater Source (hereafter *the Deep Groundwater Source*), generally represented by the Calivil and Renmark Formations, which are characterised by pale grey to white quartz sand layers, with lenses of grey to white clay, extending from the bottom of the Shepparton down to the bedrock, with a typical thickness of 100 to 300 metres

Note. Maps referred to in this plan may be inspected at offices of the Department listed in Schedule 2. A schematic representation of these groundwater sources is also available at these offices.

[3] Clause 12 (d)

Omit the subclause. Insert instead:

(d) reduce the total share component of access licences in the Deep Groundwater Source to the final extraction limit in that groundwater source,

[4] Clause 16 Recharge

Omit the clause. Insert instead:

16 Recharge

- (1) The overall basis for water sharing in this Plan is the average annual recharge to these groundwater sources, plus the requirements for basic landholder rights at the commencement of this plan and is as follows:
 - (a) 65,000 megalitres per year (hereafter *ML/yr*), plus the requirements for basic landholder rights at the commencement of this plan for the Shallow Groundwater Source and,
 - (b) 335,000 ML/yr, plus the requirements for basic landholder rights at the commencement of this plan for the Deep Groundwater Source.

Note. The recharge to the Shallow Groundwater Source of 65,000 megalitres is the net recharge resulting from inflow of 400,000 megalitres minus 335,000 ML/yr that passes through to the underlying Deep Groundwater Source, and is 65,000 ML/yr.

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

(2) The Minister may under section 45 (1) (b) of the Act, amend subclause (1) after 30 June 2011 vary the average annual recharge values for these groundwater sources 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.

[5] Clause 18 Environmental health water

Omit the clause. Insert instead:

18 Planned environmental water

Note. It is anticipated that the planned environmental 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.

- (1) This Plan establishes the following planned environmental water rules:
 - (a) subject to Part 10 Division 2 of this Plan, the physical water contained in the storage component of these groundwater sources, minus the amount required for supplementary water access permitted under clause 25, as varied by clause 29 will be reserved for the environment,
 - (b) subject to Part 10 Division 2 of this Plan 55,000 ML/yr of the average annual recharge to the Shallow Groundwater Source is reserved for the environment.
 - (c) subject to Part 10 Division 2 of this Plan 65,000 ML/yr of the average annual recharge to the Deep Groundwater Source is reserved for the environment.

Note. Access to water under supplementary water access licences in this water source will not be permitted after the 30 June 2016 and the physical water contained in the storage component of these groundwater sources plus the portion of the long-term average annual recharge identified in subclauses 1(b) and 1(c) will be reserved for the environment.

(2) The Minister may under section 45 (1) (b) of the Act, amend subclause (1) after 30 June 2011 to vary the proportion of recharge reserved as planned environmental water based on further studies of groundwater ecosystem dependency undertaken by the Minister.

Note: The studies may recommend management options other than reservation of a portion of recharge to protect groundwater dependant ecosystems.

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

[6] Clause 19 Supplementary environmental water

Omit the clause.

[7] Clause 20 Adaptive environmental water

Omit the clause. Insert instead:

20 Adaptive environmental water

- (1) Water may be committed in these groundwater sources for environment purposes by an adaptive environmental water condition pursuant to section 8B of the Act.
- (2) The holder of an access licence may request that the Minister impose an adaptive environmental water condition in respect of the whole or a part of the share component of the access licence.
- (3) The condition imposed under subclause (2) will continue until the holder requests its removal.
- (4) An access licence may be held by the Minister, a catchment management authority or other public body to the extent that the whole or part of that access licence has been surrendered as a result of on farm water savings made by works or other improvements, subject to:
 - (a) the share component of the access licence held being equal to the value of the on-farm water savings made,
 - (b) the access licence held being the highest priority category in these groundwater sources, other than a specific purpose category, and
 - (c) an adaptive environmental water condition being imposed on the access licence and that condition not being removed.
- (5) The adaptive environmental water condition specified in subclause (1) and the plan for implementation of that condition, as required by section 8E (7) of the Act:
 - (a) are to be established by the Minister, and
 - (b) shall be such as to ensure that there will be a contribution to the objectives of this Plan.

- (6) The allocation of water for access licences with an adaptive environmental water condition will be in accordance with the available water determination for the relevant category of access licence under this plan.
- (7) If the adaptive environmental water condition on an access licence requires the water to be left in the water source for environmental purposes, then the water allocation account is to be debited when the water is available in accordance with the adaptive environmental water condition on the access licence.
- (8) If the adaptive environmental water condition requires the environmental water to be taken from the water source then the water allocation account is to be debited when it is taken.
- (9) For the purposes of auditing compliance with the long-term extraction limit under this plan, water credited to an access licence that has been committed as adaptive environmental water shall be accounted for as extraction where it occurs pursuant to a licence under subclause (2) or subclause (4).
- (10) To the extent that the water allocation of an access licence which is subject to an adaptive environmental water condition is not required to meet the requirement of the condition it may be the subject of an assignment dealing in accordance with the Dealings Rules in this plan.
- (11) Notwithstanding subclause (10) an access licence with an adaptive environmental water condition may be the subject of any other dealing permitted by the Dealing Rules in this plan, provided the benefit to the environment provided for in the adaptive environmental condition is not diminished.
- (12) At the commencement of this clause, there were no access licences with an adaptive environmental water condition in these groundwater sources.

[8] Clause 21 Basic landholder rights

Omit the clause. Insert instead:

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 Minister may amend a water supply works approval to allow the landholder's affected bore to be replaced or deepened to ensure continuing access to water for basic landholder rights, or
 - (b) the Minister may amend another water supply works approval so that basic rights water may be supplied by an alternative water supply work during critical times.
- (3) In accordance with the legislative requirements, 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).
- (4) Basic landholders rights exercised under section 52 of the Act must be exercised in accordance with any guidelines established by the Minister with respect to the

reasonable use of water for domestic consumption and stock watering by landholders authorised to use water for either or both of those purposes.

Note. The Minister may, by order made under section 323 of the Act, impose temporary restrictions on basic landholder rights when it is necessary to do so in the public interest, such as to cope with a water shortage or threat to public health or safety.

Note. The Minister may enforce any reasonable use guidelines by serving orders on individual landholders under section 325 of the Act. The Minister may also order individual landholders accessing basic landholder rights to take specified measures to protect the environment, to preserve basic landholder rights or to overcome a threat to public health under section 328 of the Act.

[9] Clause 25 Estimate of water requirements

Omit the clause. Insert instead:

25 Requirements for water under access licences

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

Note. The amount of water specified in this Part represents the total volumes or total shares specified in the share components on access licence in these groundwater sources. The actual volume of water available at any time will depend on climate, access licence priority and the rules in this Plan.

[10] Insert the following after clause 25:

25A Share components of domestic and stock access licences

It is estimated that at the time of commencement of this Plan, the share components of domestic and stock access licences authorised to extract water from these groundwater sources will total 329 ML/yr, distributed as follows:

- (a) 0 ML/yr in the Shallow Groundwater Source, and
- (b) 329 ML/yr in the Deep Groundwater Source.

25B Share components of local water utility access licences

It is estimated that at the time of commencement of this Plan, the share components of local water utility access licences authorised to extract water from these groundwater sources will total 2,210 ML/yr, distributed as follows:

- (a) 0 ML/yr in the Shallow Groundwater Source, and
- (b) 2,210 ML/yr in the Deep Groundwater Source.

Note. Local water utility access licences at the commencement of the Plan were for the towns of Carrathool, Coleambally and Darlington Point.

25C Share components of aquifer access licences

(1) For those Water Act 1912 entitlements in the Shallow Groundwater Source that are to become aquifer access licences in this groundwater source at the commencement of this Plan, the share component is to be equal to the Water Act 1912 entitlement.

- (2) It is estimated that at the time of commencement of this Plan, the share components of aquifer access licences authorised to extract water from the Shallow Groundwater Source will total 3,332 unit shares.
- (3) For those Water Act 1912 entitlements in the Deep Groundwater Source equal to or less than 100 ML that are to become aquifer access licences in this groundwater source at the commencement of this Plan, the share component is to be equal to the Water Act 1912 entitlement.
- (4) For each entitlement in the Deep Groundwater Source referred to in Column 1 of Schedule 5 applying to the licences listed in Column 2 of Schedule 5 that are to become aquifer access licences in this groundwater source at the commencement of this Plan, the share component is to be equal to the share component in Column 3 of Schedule 5.
- (5) For those Water Act 1912 entitlements in the Deep Groundwater Source greater than 100 ML and not listed in Column 1 of Schedule 5 and that are to become aquifer access licences in this groundwater source at the commencement of this Plan, the share component will be established in accordance with the following formula:

$$SC_{AAL} = AV + HV$$

Where:

- (a) SC_{AAL} is the share component of the aquifer access licence,
- (b) AV is the volume required to provide asset value protection and to protect entitlements greater than 100 ML from being reduced below 100 ML and is calculated from the following formulae:

 $AV = (WAE \times 0.1857)$ or 100 whichever is the greater

Where WAE is the Water Act 1912 entitlement,

(c) HV is the history of extraction component and is calculated from the following formulae:

$$HV = (HOE_R / \Sigma HOE_R) x (R - PEW - LWU - SD - \Sigma SL - \Sigma EXC - \Sigma AV)$$

Where:

- (i) $HOE_R = 0$ where $HOE \le AV$,
- (ii) $HOE_R = HOE AV$ where HOE > AV

Note: Where $HOE_R = 0$ the history of extraction component (HV) will also be 0.

- (iii) HOE is as defined in subclause (6),
- (iv) R is the amount of recharge established in clause 16 (1)(b),
- (v) PEW is the volume of recharge reserved as planned environmental water in clause 18 (1)(c),

- (vi) LWU is the total of local water utility access licence share components in this groundwater source at the commencement of this Plan,
- (vii) SD is the total volume of domestic and stock access licences in the Deep Groundwater Source at the commencement of this Plan,
- (viii) Σ SL is the total volume of all Water Act 1912 entitlements that are less than or equal to 100 ML as defined in subclause (3),
- (ix) $\sum EXC$ is the sum of share components specified in Column 3 of Schedule 5, and
- (x) \sum AV is the total of the asset value protection component volumes calculated under subclause (5)(b),
- (6) For the purposes of subclause (5) and clause 25D HOE is equal to the greater of:
 - (a) the average extraction over the seven water years from 1995/96 to 2001/02 not exceeding the Water Act 1912 entitlement in 2001/02 and excluding zero and low extraction years prior to activation, or
 - (b) the average extraction over the five water years from 1997/98 to 2001/02 not exceeding the Water Act 1912 entitlement in 2001/02 and excluding zero and low extraction years prior to activation, or
 - (c) the average extraction over the six water years from 1997/98 to 2002/03 not exceeding the Water Act 1912 entitlement in 2001/02 and excluding zero and low extraction years prior to activation.

Note. The rules for determining HOE are contained in Appendix 4.

- (7) For the purposes of subclause (6) zero and low extraction years are years where extraction was less than 20% of the maximum volume of water extracted in any one year between 1995/96 and 2001/02.
- (8) For the purposes of subclause (6) activation is defined as the first year between 1995/96 and 2001/02 in which a licence holder extracted 20% or more of the maximum volume of water extracted in any one year between 1995/96 and 2001/02.
- (9) It is estimated that at the time of commencement of this Plan the share components of aquifer access licences established under subclauses (2), (3), (4) and (5) for the Deep Groundwater Source will total approximately 267,500 unit shares.

25D Share components of supplementary water access licences

- (1) Those Water Act 1912 entitlements that are to be converted to an aquifer access licence in the Deep Groundwater Source under clause 25C (3) may also receive a supplementary water access licence.
- (2) The share component of a supplementary water access licence converted under subclause (1) will established in accordance with the following formula:

$$SC_{SWAL} = HOE - SC_{AAL}$$

Where:

- (a) SC_{SWAL} is the share component for the supplementary water access licence.
- (b) HOE is as defined in subclauses 25C (6), (7) and (8),
- (c) SC_{AAL} is the share component of the aquifer access licence established under clause 25C (4) and (5).
- (3) It is estimated that at the time of commencement of this Plan the share components of supplementary water access licences established under subclause (1) for the Deep Groundwater Source will total 39,800 unit shares

Note: Not all aquifer access licences amended under clause 25C (3) will receive a supplementary water access licences. Only those licences who have a HOE as defined in subclauses 25C (6), (7) and (8) which is greater than their new Aquifer Access Licence Share component.

25E Changes to share components

- (1) This Plan recognises that the total requirements for water for extraction within these groundwater sources may change during the term of this Plan as a result of:
 - (a) the granting, surrender or cancellation of access licences, or
 - (b) the variation of local water utility access licences under section 66 of the Act.
- (2) Pursuant to section 68A of the Act the share component of each supplementary water access licence in the Deep Groundwater Source will be reduced to 0 ML on 1 July 2015.
- (3) Pursuant to section 77A of the Act supplementary water access licences will be cancelled after 1 July 2015.

[11] Clause 26 Rules for granting access licences

Omit the clause. Insert instead:

26 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b), 61 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) Applications for access licences may be made and access licences granted in these groundwater sources if they are for:
 - (a) a specific purpose access licence for which application is provided for under clause 19 of the Water Management (General) Regulation 2004 (hereafter *the Regulation*) in accordance with section 61 (1) (a) of the Act,

Note. At the commencement of this Plan, clause 19 of the Regulation provides for the following specific purpose access licences to be applied for:

 a local water utility access licence (subcategory "domestic and commercial"), for the purpose of domestic consumption and commercial activities,

- (b) a domestic and stock access licence (subcategory "domestic"), for the purpose of domestic consumption,
- (c) an aquifer access licence (subcategory "town water supply"), for the purpose
 of supply to communities for domestic consumption and commercial activities,
 and
- (d) any category of specific purpose access licence (subcategory "Aboriginal cultural"), for Aboriginal cultural purposes.

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

- (b) an access licence with a zero share component in accordance with sections 61 (1) (b) and 63 (5) of the Act,
- (c) an access licence that may be granted in accordance with a dealing that is permitted by Part 11 of this Plan,
- (d) an aquifer (community and education) access licence, or
- (e) an access licence within the Shallow Water Source that accesses water from less than 20 metres below the ground surface and, in the opinion of the Minister, are in areas where the water table has risen, and lowering of the water table is required, and only if the sum of all access licence share components in the Shallow Water Source remain below 10,000.
- (3) 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.
- (4) 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 3 of this Plan.
- (5) An access licences may be granted in this water source where:
 - (a) a Water Act 1912 licence was not converted at the commencement of this plan, or
 - (b) a licence is found to be taking water from a groundwater source in this plan but has been incorrectly identified as taking water from another groundwater source and the licence is cancelled in the other groundwater source.
- (6) Aquifer access licences granted under subclause (5) shall be subject to the rules specified in clauses 25C and 25D.

[12] Clause 27 Long-term extraction limits

Omit the clause. Insert instead:

27 Extraction limits

- (1) This Division is made in accordance with section 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, minus the proportion of recharge reserved as planned environmental water in clause 18, plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan, and are initially as follows:
 - (a) 10,000 ML/yr in the Shallow Groundwater Source, plus the total requirements for basic landholder rights at the commencement of this plan, and
 - (b) 270,000 ML/yr in the Deep Groundwater Source, plus total water made available to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan.

[13] Clause 28 Variation of the long-term extraction limit

Omit the clause. Insert instead:

28 Variation of extraction limits

- (1) The Minister may under section 45 (1) (b) of the Act amend clause 27 after 30 June 2011 to vary the extraction limit in accordance with:
 - (a) any change to the average annual recharge arising from clause 16 (2), or
 - (b) any change to the environmental health water arising from clause 18 (2).
- (2) If the extraction limit is amended under subclause (1) then:
 - (a) the extraction limit will not be greater than 390,000 ML/yr in the Deep Groundwater Source, plus the total water allocations made to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan, and
 - (b) the extraction limit will not be less than 230,000 ML/yr in the Deep Groundwater Source, plus the total water allocations made to supplementary water access licences under clause 29, plus the total requirements for basic landholder rights at the commencement of this plan,

[14] Insert the following clause after clause 28:

28A Compliance with extraction limits

(1) Water extraction in these groundwater sources will be monitored each water year to determine if there is any growth in volume extracted above the extraction limit specified in clause 27, based on a comparison of the extraction limit against the average extraction within each groundwater source over that year and the preceding 2 years.

Note. Growth in extractions may occur due to the granting of new licences in accordance with Part 8 of this Plan.

- (2) For the purposes of auditing compliance with the extraction limit, if water that:
 - (a) pursuant to an access licence is committed as adaptive environmental water to be left in the aquifer for environmental purposes, then extraction will be assumed to be equal to 100% of the available water determination made under clause 29, or
 - (b) pursuant to an access licence is committed as adaptive environmental water to be extracted for environmental purposes, then extraction will be that measured through the approved water supply work (bore).
- 3) If the 3 year average of extraction in a groundwater source exceeds the extraction limit established in clause 27 by 5% or greater, then the available water determination made for aquifer access licences under clause 29 (6) for the following water year, should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the extraction limit for that groundwater source,

[15] Clause 29 Available water determinations

Omit the clause. Insert instead:

29 Available water determinations

- (1) This Division is made in accordance with section 20 (2) (b) of the Act.
- (2) Pursuant to section 58 (4) of the Act this plan amends the relative priorities of the categories of aquifer access licence and supplementary water access licence to the extent necessary to legally make the available water determinations as set out in this clause.
- (3) All available water determinations in these groundwater sources shall be expressed as either:
 - (a) a percentage of the share component for all access licences where share components are specified as megalitres per year, or
 - (b) megalitres per unit of share component for all access licences where share components are specified as a number of shares.
- (4) An available water determination for each category of access licence in these groundwater sources should be made at the commencement of each water year.
- (5) The available water determinations made at the commencement of the water year for domestic and stock and local water utility access licences should be 100% of share components.
- (6) The available water determination made at the commencement of the water year for aquifer access licences should be such that the total of available water determinations under this clause for each groundwater source equals the extraction limit set in clause 27 (2) as varied by clause 28 minus the total requirements for basic landholder rights, minus the total available water determinations for domestic and stock and local water utility access licences and supplementary water access

- licences, or such lower amount as results from the operation of clause 28A (3) or subclause (7).
- (7) The available water determination for all aquifer access licences in the Shallow Groundwater Source will not exceed 1 ML per unit of share component.
- (8) The available water determination made at the commencement of this plan for supplementary water access licences should be 0.9 ML per unit of share component.
- (9) The available water determination made at the commencement of each year after the 2006/07 water year for supplementary water access licences will be reduced by a further 0.1 ML per unit of share component, and
- (10) The available water determination for supplementary water access licences will be reduced to 0 ML per unit of share component at the commencement of the 2015/16 water year.

Note. Subclauses (9) and (10) means that allocations for supplementary water access licences will diminish each year by 0.1 ML per unit share. For example, the available water determination for the 2006/07 water year is 0.9, the 2007/08 water year is 0.8, the 2008/9 water year is 0.7, the 2009/10 water year is 0.6, the 2010/11 water year is 0.5, the 2011/12 water year is 0.4, the 2012/13 water year is 0.3, 2013/14 water year is 0.2, the 2014/15 water year is 0.1, and the 2015/16 water year is 0.

[16] Note following clause 32

Omit the note. Insert instead:

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

[17] Clause 34 Annual accounting for water extraction

Omit the clause. Insert instead:

34 Annual accounting for water extraction

- (1) Water taken from these groundwater sources will be accounted for at least annually.
- (2) Water taken by a water supply work (bore) nominated by an access licence will be periodically debited against the access licence water allocation account.
- (3) A water allocation account shall remain at or above zero at all times.
- (4) Unused water allocations in the water allocation accounts of domestic and stock access licences or of local water utility access licences or supplementary water access licences cannot be carried over from one water year to the next.
- (5) In any water year, subject to local impact management restrictions arising from Part 10, Division 2 of this Plan, water taken under a local water utility access licence or a domestic and stock access licence, or a supplementary water access licence, and total water in any water allocation account associated with such an access licence at any time may not exceed a volume equal to:
 - (a) 100% of the share component of the access licence,

- (b) plus any water allocations assigned from another access licence under section 71T 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 71T of the Act in that year.
- (6) Unused water allocations in the water allocation accounts of aquifer access licence may be carried over from one water year to the next, subject to subclause (7).
- (7) The maximum amount of unused water allocations that can be carried over under subclause (6) is equal to 2 ML per unit of share component.
- (8) In any water 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 that is equal to:
 - (a) 2 ML per unit of aquifer access licence share component,
 - (b) plus any water allocations assigned from another access licence under section 71T of the Act in that year, and
 - (c) minus any water allocations assigned to another access licence under section 71T of the Act in that year.
- (9) Total water in any aquifer access licence water allocation account at any time may not exceed a volume that is equal to:
 - (a) 3 ML per unit of aquifer access licence share component,
 - (b) plus any water allocations assigned from another licence under section 71T of the Act in that year,
 - (c) minus any water allocations assigned to another licence under section 71T of the Act in that year.
- (10) In any water year, subject to local impact management restrictions arising from Part 10, Division 2 of this Plan, water taken from these groundwater sources under a supplementary water access licence may not exceed the allocation resulting from the available water determination.
- (11) Where both an aquifer access licence and a supplementary water access licence nominate the same water supply works and use approval, water allocations will be debited from a supplementary water access licence water allocation account before water is debited from an aquifer access licence water allocation account.

[18] Clause 36 (5)

Omit the clause. Insert instead:

(5) In the Shallow Groundwater Source, if the depth to the watertable outside areas where the water table has risen unnaturally, and its lowering is required, is identified as having a declining trend to the extent that local ecosystems could be adversely impacted upon by

the 2015/16 water year, then a review of extraction by access licence holders in the affected area will be undertaken.

[19] Clause 37 (1)

Omit the clause. Insert instead:

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

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

[20] Clause 38 (2)

Omit the clause. Insert instead:

(2) Pursuant to section 45 (1) (b) of the Act, the Minister may identify further high priority groundwater dependent ecosystems and include them in Schedule 4 after 30 June 2011, based on further studies of groundwater ecosystem dependency undertaken by the Minister.

[21] Clause 43

Omit the clause. Insert instead:

43 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (d) of the Act and with the Minister's access licence dealing principles gazetted under section 71Z of the Act.
- (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 71Z of the Act and the rules in this Part.

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

Note. Where there is an inconsistency between access licence dealing rules established in this Plan and Minister's access licence dealing principles gazetted subsequent to the commencement of this Plan, section 71Z of the Act provides for the Minister's access licence dealing principles to prevail.

[22] Clause 44 (1)

Omit the clause. Insert instead:

(1) This clause applies to any relevant dealings under sections 71Q, 71S, and 71W of the Act, and section 71T of the Act with respect to water allocation assignments within a groundwater source.

[23] Clause 45 Rules for change of water source

Omit the clause. Insert instead:

45 Rules for change of water source

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

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

- (2) Dealings under this section 71R of the Act that change the water source to which an access licence applies are prohibited in these groundwater sources, except as provided for in this clause.
- (3) An access licence with a share component specifying one of these groundwater sources may be cancelled and a new licence issued specifying another of these groundwater sources only if the total share components of all access licences in the groundwater source in which the access licence is to be issued remains below:
 - (a) for the Shallow Groundwater Source: the recharge established in clause 16 (1) (a) minus the proportion of recharge reserved for the environment in clause (18) (1) (b).
 - (b) for the Deep Groundwater Source: the recharge established in clause 16 (1) (b) minus the proportion of recharge reserved for the environment in clause (18) (1) (c), minus total volume of share components for domestic and stock access licences established in clause 25A (b), minus the volume or share components for local water utilities as established clause 25B (b).
- (4) The volume of the share component on a licence issued under a dealing provided for in subclause (3) is to be the volume of the cancelled access licence share component.

[24] Clause 46 (1)

Omit the clause. Insert instead:

(1) This clause relates to dealings under section 710 of the Act.

[25] Clause 47 (1)

Omit the clause. Insert instead:

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

[26] Clause 48 (1)

Omit the clause. Insert instead:

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

[27] Clause 49 (1)

Omit the clause. Insert instead:

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

[28] Clause 51 Access licence conditions

Omit the clause. Insert instead:

51 Access licence conditions

- (1) All access licences shall have mandatory conditions to give effect to the provisions of this Plan in relation to the following:
 - (a) the specification of the share component of the access licence,
 - (b) the specification of the extraction component of the access licence,
 - (c) the requirement that all taking of water under the access licence will be subject to the available water determinations,
 - (d) the requirement that all taking of water under the access licence will be subject to any local impact management restrictions established in this Plan,
 - (e) the requirement that all taking of water under the access licence will be subject to the account management rules established in this Plan,
 - (f) the requirement that water may only be taken under the access licence by the water supply work (bore) nominated by the access licence,
 - (g) the taking of water in accordance with the access licence may only occur if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account, and
 - (h) any other conditions required to implement the provisions of this Plan.
- (2) All supplementary water access licences shall have mandatory conditions to give effect to clause 25E (2) and (3), in relation to the amendment of access licence share components.
- (3) All local water utility access licences shall have mandatory conditions that only allow the taking of water for the exercise of a water supply function of the local water utility or for other such purpose provided for under the Act.
- (4) All access licences shall have mandatory conditions to give effect to clauses 36, 37 and 38, in relation to water level management, water quality management and protection of groundwater dependent ecosystems.

[29] Clause 53 Monitoring

Omit the clause. Insert instead:

53 Monitoring

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

Note. Review and Audit of this Plan

In accordance with section 43A of the Act, the Natural Resources Commission must undertake a review of this Plan prior to any decision to extend its term or to make a new plan. The review must consider the extent to which the Plan's water sharing provisions have contributed to achieving or not achieving the relevant natural resource management standards and targets in the catchment management area (as referred to in section 5 of the Catchment Management Authorities Act 2003).

When undertaking this review the Natural Resources Commission is required to call for public submissions. The Commission will take into consideration any submission received as well as any other relevant State-wide or regional government policies or agreements that apply to the catchment management area.

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.

[30] Clause 54 Amendment of this Plan

Omit the clause. Insert instead:

54 Amendment of this Plan

- (1) This Part is made in accordance with section 45 (1) (b) 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 planned environmental water,
 - (c) clause 28 in respect to long-term average extraction limits,
 - (d) clause 34 in respect to the water allocation account management rules, or
 - (e) clause 38 in respect to high priority groundwater dependent ecosystems.

[31] Schedule 1 Dictionary

Include the following:

long term average storage component is the volume of water in the aquifer less the combined average annual recharge and requirements for basic rights at the commencement of this plan, and exceeds the requirements for supplementary access provided for in this Plan.

water year is a 12 month period from 1 July to 30 June.

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

Omit the schedule. Insert instead:

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

Level of assessed contribution:

FULL – contributes to target in full

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

PARTIAL - goes some way to contributing to the target

LOW - only small degree of contribution to target

Relevant target	Level of contribution	Comments
Target 1e The long term average annual extractions for groundwater limited (or being phased down) to an ecologically sustainable level (the Sustainable Yield) as determined by detailed assessment of each groundwater source and consultation with the relevant management committee. In the absence of such an assessment, the following to apply: 100 percent of average annual recharge for a groundwater source where there is no significant ecosystem dependency; 70 percent of average annual recharge where there is significant ecosystem dependency	FULL	This Plan establishes an extraction limit that is equal to 15% of recharge in the Shallow groundwater source, and phases extraction down to 80% of recharge in the Deep groundwater source.
Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon	FULL	Rules set out in Part 9.
Target 2 All management plans incorporating mechanisms to protect and restore aquatic habitats, and the diversity and abundance of native animals and plants, with particular reference to threatened species, populations and communities and key threatening processes	HIGH	 This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any designated high priority dependent groundwater ecosystems (Schedule 4 which nominates prior streams) or any creek or river. Part 10 sets out local impact management rules in response to local groundwater pressure or level declines, and groundwater quality impacts.
Target 5 Access rights for water access	HIGH	This Plan establishes

licensees clearly and legally specified in terms of share and extraction components		transparent extraction limits and allocation/account rules. • Licences are tradeable. • The local extraction rules means that future rights will not be exclusive but affected by the future location of works. Licences with existing bores will have priority over licences requiring new bores.
Target 6a For groundwater sources, the total volume of water specified on access licences reduced over the term of a water sharing plan to no more than 125 percent of the Sustainable Yield	FULL	 At the commencement of the Plan total licence volumes for the Deep groundwater source will be greater than the extraction limit. However, total licence volumes are reduced to 100% of the sustainable yield over the term of the Plan.
Target 10 Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable baseflows to the river to be maintained or improved	HIGH	 There is little information in available on connectivity. However, baseflows should be protected by limiting extraction to 15% of recharge. This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any creek or river.
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	HIGH	 The ecosystems directly dependent on the Shallow Groundwater Source, but not on the Deep Groundwater Source, are listed in Schedule 4. They should be protected by limiting extraction to 15% of recharge. This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any designated high priority dependent groundwater ecosystems (Schedule 4 which nominates only prior streams) or any creek or river.

Target 12 Measures in place in all	HIGH	Part 10 sets out local impact management rules in response to local groundwater pressure or level declines, and groundwater quality impacts. This Plan has identified the
water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use		volumes necessary to meet basic domestic and stock requirements. • It also protects domestic and stock bores from interference from higher yielding bores.
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	PARTIAL	An aboriginal community representative has been involved in development of this Plan.
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	 No Aboriginal cultural or traditional sites or requirements have been identified. The environmental health provisions should protect dependent ecosystems of importance to Aboriginal people.
Target 16a All share components of access licences tradeable	FULL	Licence volumes and water allocations are tradeable.
Target 16e Any unassigned access rights identified and clear mechanisms established for their future assignment	FULL	This Plan established rules for the granting of new licences.
Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit	HIGH	This Plan also prohibits new or replacement extraction bores within 1000 metres (or 200 metres for basic landholder rights bores) of any designated high priority dependent groundwater ecosystems (Schedule 4 which nominates only prior streams) or any creek or river.
Target 35 All management plans	HIGH	This Plan includes a water

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		quality objective, and establishes rules to protect water quality. This Plan is explicit about the beneficial uses and criteria.
Target 38 Aquifer water quality vulnerability zones mapped and extraction limits reviewed to reduce the risk of lateral intrusion of poor quality water	PARTIAL	 No vulnerability mapping of area is referenced in this Plan. This Plan includes rules for managing the impacts of extraction on water quality.

[33] Insert new schedule:

Schedule 5 Aquifer access licence share component

(Clauses 25C (4) and 25C (5))

Column 1	Column 2	Column 3
Water Act Entitlement	Licence(s)	Aquifer Access Licence Share Component
40PT930061	40BL186295, 40BL190019	2405
40PT930572	40BL189576	1028
50PT940188	50BL196102, 50BL196791	3120
40PT930427	40BL186604	925

[34] Appendix 4 Minister's access licence dealing principles

Omit Appendix 4. Insert instead:

Appendix 4 Rules for determining History of Extraction

(Clause 25C (6))

Rule 1

The history of extraction for each entitlement is calculated separately, irrespective of ownership.

Rule 2

When meter failure has prevented the measurement of actual extraction, extraction will be estimated on the basis of:

- a) the extraction that was estimated at the time of meter failure held on record by the Department, or
- b) pump running times held on record by the Department, or
- c) areas of crops grown and water usage for similar crops.

Rule 3

Estimates made under Rule 2 will be capped at licensed access to water for the entitlement for the year in question.

Rule 4

Where non-volumetric entitlement have been converted to volumetric entitlement during or after the period being used to calculate HOE, any relevant historical extraction or other data used in converting the entitlements will be used to calculate HOE.

Rule 5

In the event of zero or reduced extraction resulting from bore failure the year in which the bore failed will be excluded in calculating HOE.

If a licence holder substantiates a case that the failure of a bore had a greater impact on extraction in the water year following bore failure, then this year rather than the year in which the failure occurred, will be the year excluded.

The licence holder must provide documented evidence of the bore failure.

Rule 6

Failure of associated bore equipment (eg motor, gearbox etc) will not be considered bore failure for the purpose of calculating HOE.

Rule 7

Reduced levels of extraction from a bore due to lower aquifer levels will not be considered bore failure for the purpose of determining HOE.

Rule 8

In the event of lower extraction resulting from crop failure no allowance will be made in calculating the HOE.

Rule 9

Water extracted pursuant to a temporary transfer of entitlement will be accounted in the HOE of the seller or transferor.

Rule 10

Where properties have been amalgamated, all extraction prior to amalgamation will be combined and together with extraction occurring after amalgamation will be used to calculate HOE.

Rule 11

When new entitlements have been created due to subdivision, extractions under the original entitlement will be apportioned to each new entitlement in proportion to the entitlement at the commencement of the plan and together with extraction occurring after subdivision will be used to calculate HOE.

Alternately, where all the new entitlement holders unanimously agreed, extraction under the original entitlement will be calculated for each bore licence and together with extraction occurring after the subdivision will be used to calculate HOE.

Rule 12

Where extractions have not been metered extraction will be assessed on the basis of (in priority order):

- a) any relevant historical extraction data used in converting non volumetric entitlement to volumetric entitlement;
- b) recorded pump usage hours if available, and
- c) areas of crops grown and water usage for similar crops each year.

Rule 13

Where an entitlement holder is unable to or does not provide information on which to base an assessment for a year the extraction for that year will be will be assessed as zero megalitres.

Rule 14

All extractions that a licence holder 'carried over' and/or 'borrowed' that were in accordance with management rules applying at the time will be included as extraction for determining history of extraction.

Rule 15

Metered extraction will first be allocated to:

- a) groundwater only extraction capped at the allocation for that year, then;
- b) conjunctive groundwater allocation (where applicable) capped at the conjunctive groundwater entitlement for that year, then;
- c) carry over within management rule limits and then;
- d) borrowing within management rule limits.

The sum of extraction from groundwater only entitlement, conjunctive groundwater entitlement, carryover & borrowing provision and temporary transfers will be used to calculate the HOE. Any remaining extraction will not be used to calculate HOE.

WATER MANAGEMENT ACT 2000

Water Management (Minister's Plan) Further Order 2006

I, IAN MACDONALD, M.L.C., Minister for Natural Resources, in pursuance of section 45(4) of the *Water Management Act 2000* and with the concurrence of the Minister for the Environment, do, by this my Order, amend the *Water Sharing Plan for the Lower Lachlan Groundwater Source 2003* by omitting from clause 3 the matter '1 October 2006' and by inserting instead the matter '1 December 2006'.

This Order takes effect on the date that it is published in the Gazette.

Dated this nineteenth day of September 2006.

IAN MACDONALD, M.L.C
Minister for Natural Resource

Explanatory Note

The object of this Order is to postpone the commencement of the *Water Sharing Plan for the Lower Lachlan Groundwater Source 2003* from 1 October 2006 to 1 December 2006.

WATER MANAGEMENT ACT 2000

Water Management (Minister's Plan) Further Order 2006

I, IAN MACDONALD, M.L.C., Minister for Natural Resources, in pursuance of section 45(4) of the *Water Management Act 2000* and with the concurrence of the Minister for the Environment, do, by this my Order, amend the *Water Sharing Plan for the Upper and Lower Namoi Groundwater Source 2003* by omitting from clause 3 the matter '1 October 2006' and by inserting instead the matter '1 November 2006'.

This Order takes effect on the date that it is published in the Gazette.

Dated this nineteenth day of September 2006.

IAN MACDONALD, M.L.C	١
Minister for Natural Resource	S

Explanatory Note

The object of this Order is to postpone the commencement of the *Water Sharing Plan for the Upper and Lower Namoi Groundwater Source 2003* from 1 October 2006 to 1 November 2006.

FISHERIES MANAGEMENT ACT 1994 Section 8 Notification - fishing closure Bouddi Fishing Closure

I, RENATA BROOKS, Deputy Director-General, Agriculture, Fisheries and Regional Relations, with the delegated authority of the Minister for Primary Industries and the Director-General of the NSW Department of Primary Industries pursuant to sections 227 and 228 of the *Fisheries Management Act 1994*, do by this notification, prohibit the taking of fish by the methods of fishing specified in Column 1 of the Schedule below, from the waters shown opposite in Column 2 of that Schedule.

This prohibition will be effective for a period of five (5) years commencing on 28 September 2006.

Schedule
Bouddi Fishing Closure - all methods

Column 1	Column 2
Methods	Waters
All methods.	The whole of the waters of that part of the South Pacific Ocean adjacent to Bouddi National Park, enclosed within the following boundaries: commencing at the eastern headland of Bullimah Beach, then along a line drawn generally north-easterly along the highwater mark on the foreshore of Bouddi National Park, to Bombi Point, then along a line bearing 135 degrees for 402 metres, then along a line bearing 239 degrees for 1327 metres, then along a line bearing 258 degrees for 2534 metres, then along a line bearing 360 degrees for 402 metres to the point of commencement. (NB the boundary for this closure is denoted on 1:25000 series Topographic Map 'Broken Bay 9130-1-N' published by Land Information Centre (DLWC).

RENATA BROOKS
Deputy Director-General
Agriculture, Fisheries and Regional Relations
NSW Department of Primary Industries
20 September 2006

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