



New South Wales

Water Sharing Plan for the North Western Unregulated and Fractured Rock Water Sources 2011

under the

Water Management Act 2000

I, the Minister for Primary Industries, in pursuance of section 50 of the *Water Management Act 2000*, do, by this Order, make the following Minister's Plan for the North Western Unregulated and Fractured Rock Water Sources.

Dated this 29th day of August, 2011.

KATRINA HODGKINSON, MP
Minister for Primary Industries

Explanatory note

Section 50 (1) of the *Water Management Act 2000* provides that the Minister may, by order published on the NSW legislation website, make a Minister's plan:

- (a) for any part of the State that is not within a water management area, or
- (b) for any water management area or water source, or part of a water management area or water source, for which a management plan is not in force, or
- (c) for any water management area or water source, or part of a water management area or water source, for which a management plan is in force, but only so as to deal with matters not dealt with by the management plan.

The purpose of this Order is to make the *Water Sharing Plan for the North Western Unregulated and Fractured Rock Water Sources 2011*.

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Water Sharing Plan for the North Western Unregulated and Fractured Rock Water Sources 2011

Part 1 Introduction

Note. Part 12 allows for amendments to be made to Part 1.

1 Name of this Plan

This Plan is the *Water Sharing Plan for the North Western Unregulated and Fractured Rock Water Sources 2011* (hereafter **this Plan**).

2 Nature and status of this Plan

- (1) This Plan is made under section 50 of the *Water Management Act 2000* (hereafter **the Act**).
- (2) This Plan is a plan for water sharing and generally deals with the matters set out in sections 20 and 21 of the Act, as well as other sections of the Act.

Note. Where a provision of this Plan is made under another section of the Act, the section is referred to in notes to this Plan.

3 Commencement of this Plan

This Plan commences on 1 October 2011.

Notes.

- 1 In accordance with section 43 of the Act, this Plan will have effect for 10 years from 1 July 2012.
- 2 The Minister may extend this Plan for a further period of 10 years after it is due to expire, in accordance with section 43A of the Act.

4 Application of this Plan

- (1) This Plan applies to the following water sources (hereafter **these water sources**) within the Western Water Management Area:
 - (a) North Western Water Source,

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- (b) Kanmantoo Fold Belt North Western Groundwater Source,
- (c) Adelaide Fold Belt North Western Groundwater Source, and
- (d) Lachlan Fold Belt North Western Groundwater Source.

Note. The Western Water Management Area was constituted by Ministerial order made under section 11 of the *Water Management Act 2000* published in the NSW Government Gazette No 180 on 23 November 2001 at page 9389.

- (2) These water sources are shown on the registered map called The North Western Unregulated and Fractured Rock Water Sources held by the NSW Office of Water, hereafter the ***Registered Map***.

Note. An overview of the Registered Map is shown in Appendix 1. Copies of the Registered Map may be inspected at the offices listed in Appendix 2.

- (3) Subject to subclause (5), the North Western Water Source includes all water:
 - (a) occurring naturally on the surface of the ground shown on the Registered Map, and
 - (b) in rivers, lakes, and wetlands in these water sources.
- (4) Subject to subclause (5), the Kanmantoo Fold Belt North Western Groundwater Source, the Adelaide Fold Belt North Western Groundwater Source and the Lachlan Fold Belt North Western Groundwater Source (hereafter ***these fractured rock groundwater sources***) include all water contained within:
 - (a) all fractured rocks below the surface of the ground within the groundwater source boundaries shown on the Registered Map, and
 - (b) alluvial sediments within all areas that are not overlain by the NSW Great Artesian Basin shallow area as shown on the Registered Map.

Note. The alluvial sediments described in subclause (b) are contained within the outcropped areas of these fractured rock groundwater sources. In this note, an outcropped area means a groundwater system that occurs at the earth's surface.

- (5) These water sources do not include water:
 - (a) contained in any porous rocks,

- (b) contained in the Central Groundwater Source as defined in the *Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008*,
- (c) contained in all formations to a maximum depth of 60 metres below the surface of the ground within the excluded NSW Great Artesian Basin shallow area as shown on the Registered Map, and
- (d) taken under a floodplain harvesting access licence with a share component that does not specify one of these water sources.

5 Understanding the rules in this Plan

This Plan contains various rules. Where appropriate, rules specified in this Plan are given effect by mandatory conditions for access licences and approvals contained in Part 11 of this Plan.

Note. The rules in this Plan include environmental water rules, access licence dealing rules, rules for granting and managing access licences, rules for water supply work approvals, rules for the making of available water determinations, water allocation account rules and daily access rules.

6 Interpretation

- (1) Words and expressions that are defined in the Dictionary in Schedule 1 to this Plan have the meaning set out in that Schedule.
- (2) Unless otherwise defined in this Plan, words and expressions that are defined in the Act or in the *Water Management (General) Regulation 2004* (hereafter ***the Regulation***) have the same meaning in this Plan.
- (3) Unless otherwise specified in this Plan, a clause that applies to a category of access licence also applies to any subcategories of that category of access licence.
- (4) Schedules to this Plan form part of this Plan.
- (5) Notes in the text of this Plan do not form part of this Plan.
- (6) Appendices to this Plan do not form part of this Plan.

Part 2 Vision, objectives, strategies and performance indicators

Note. This Part is made in accordance with section 35 (1) of the Act.

7 Vision statement

The vision of this Plan is to provide for healthy and enhanced water sources and water dependent ecosystems and for equitable water sharing among users in these water sources.

8 Objectives

The objectives of this Plan are to:

- (a) protect, preserve, maintain and enhance the important river flow dependent and high priority groundwater dependent ecosystems of these water sources,
- (b) protect, preserve, maintain and enhance the Aboriginal, cultural and heritage values of these water sources,
- (c) protect basic landholder rights,
- (d) manage these water sources to ensure equitable sharing between users,
- (e) provide opportunities for enhanced market based trading of access licences and water allocations within environmental and system constraints,
- (f) provide water allocation account management rules which allow sufficient flexibility in water use,
- (g) contribute to the maintenance of water quality,
- (h) provide recognition of the connectivity between surface water and groundwater,
- (i) adaptively manage these water sources, and
- (j) contribute to the environmental and other public benefit outcomes identified under the Water Access Entitlements and Planning Framework in the *Intergovernmental Agreement on a National Water Initiative (2004)* (hereafter

the NWI).

Note. Under the NWI, water that is provided by NSW to meet agreed environmental and other public benefit outcomes as defined within relevant water plans is to:

- (i) be given statutory recognition and have at least the same degree of security as water access entitlements for consumptive use and be fully accounted for,
- (ii) be defined as the water management arrangements required to meet the outcomes sought, including water provided on a rules basis or held as a water access entitlement, and
- (iii) if held as a water access entitlement, may be made available to be traded (where physically possible) on the temporary market, when not required to meet the environmental and other public benefit outcomes sought and provided such trading is not in conflict with these outcomes.

9 Strategies

The strategies of this Plan are to:

- (a) establish environmental water rules,
- (b) identify water requirements for basic landholder rights,
- (c) identify water requirements for access licences,
- (d) establish rules for the granting of access licences and approvals,
- (e) establish rules that place limits on the availability of water for extraction,
- (f) establish rules for making available water determinations,
- (g) establish rules for the operation of water accounts,
- (h) establish rules which specify the circumstances under which water may be extracted,
- (i) establish access licence dealing rules,
- (j) establish performance indicators, and
- (k) identify triggers for and limits to changes to the rules in this Plan.

10 Performance indicators

The following indicators are to be used to measure the success of the strategies to reach the objectives of this Plan:

- (a) change in low flow regime,
- (b) change in moderate to high flow regime,
- (c) change in surface water and groundwater extraction relative to the long-term average annual extraction limit,
- (d) change in local water utility access,
- (e) change in or maintenance of, the ecological value of key water sources and their dependent ecosystems,
- (f) the extent to which basic landholder rights requirements have been met,
- (g) the extent to which local water utility requirements have been met,
- (h) the extent to which native title rights requirements have been met,
- (i) the change in economic benefits derived from water extraction and use, and
- (j) the extent of recognition of spiritual, social and customary values of water to Aboriginal people.

Part 3 Bulk access regime

11 Bulk access regime

- (1) This Plan establishes a bulk access regime for the extraction of water under access licences in these water sources, having regard to:
 - (a) the environmental water rules established in Part 4 of this Plan,
 - (b) the requirements for water for basic landholder rights identified in Division 2 of Part 5 of this Plan,
 - (c) the requirements for water for extraction under access licences identified in Division 3 of Part 5 of this Plan, and
 - (d) the access licence dealing rules established in Part 10 of this Plan.
- (2) The bulk access regime established in this Plan for these water sources:
 - (a) recognises and is consistent with the limits to the availability of water set in relation to these water sources contained in Division 1 of Part 6 of this Plan,
 - (b) establishes rules according to which access licences are to be granted and managed contained in Parts 7 and 8 of this Plan and available water determinations to be made contained in Division 2 of Part 6 of this Plan,
 - (c) recognises the effect of climatic variability on the availability of water as described in clause 12,
 - (d) establishes rules with respect to the priorities according to which water allocations are to be adjusted as a consequence of any reductions in the availability of water due to an increase in average annual extraction against the long-term average annual extraction limit, contained in Division 1 of Part 6 of this Plan,
 - (e) contains provisions with respect to the conditions that must be imposed as mandatory conditions on access licences, contained in Division 2 of Part 11 of this Plan, and

- (f) recognises and is consistent with the water management principles contained in section 5 of the Act.

12 Climatic variability

This Plan recognises the effects of climatic variability on river flow and groundwater levels in these water sources by having provisions that:

- (a) manage the sharing of water in these water sources within the limits of water availability on a long-term average annual basis and the priorities according to which water allocations are to be adjusted as a consequence of any reductions in the availability of water due to an increase in average annual extraction against the long-term average annual extraction limit, contained in Division 1 of Part 6 of this Plan, and
- (b) manage the sharing of water in specified water sources on a daily basis in these water sources, contained in Division 2 of Part 8 of this Plan.

Note. Other statutory tools are available to manage climatic variability within a water source, for example, temporary water restrictions under section 324 of the Act.

Part 4 Planned environmental water provisions

Note. This Part is made in accordance with sections 8, 8A, and 20 of the Act.

13 General

This Part contains environmental water rules for the commitment, identification, establishment and maintenance of planned environmental water in these water sources.

Note. In accordance with the Act, planned environmental water is water that is committed by management plans for fundamental ecosystem health or other specified environmental purposes, either generally or at specified times or in specified circumstances and that cannot to the extent committed be taken or used for any other purpose.

14 Commitment and identification of planned environmental water

- (1) Planned environmental water is committed and identified in these water sources as set out in this clause.
- (2) Water is committed and identified as planned environmental water in these water sources in the following ways:
 - (a) by reference to the commitment of the physical presence of water in the water source,
 - (b) by reference to the long-term average annual commitment of water as planned environmental water, and
 - (c) by reference to the water that is not committed after the commitments to basic landholder rights and for sharing and extraction under any other rights have been met.

15 Establishment and maintenance of planned environmental water

- (1) Planned environmental water is established and maintained in these water sources as set out in this clause.
 - (2) Planned environmental water in these water sources is established as follows:
 - (a) it is the physical presence of water:
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- (i) in the North Western Water Source, that results from the access rules specified in Division 2 of Part 8 of this Plan ,

Note. The rules in Division 2 of Part 8 of this Plan for the North Western Water Source set flow rates or flow levels below which the taking of water is not permitted. Some limited exemptions apply.

- (ii) in the Kanmantoo Fold Belt North Western Groundwater Source, that is equal to 40% of the long-term average annual rainfall recharge in areas that are not high environmental value areas and 100% of the long-term average annual rainfall recharge in high environmental value areas at the commencement of this Plan,

Note. At the commencement of this Plan the long-term average annual rainfall recharge for the Kanmantoo Fold Belt North Western Groundwater Source is estimated to be 46,550 megalitres per year in those areas that are not high environmental areas and 5,145 megalitres per year in high environmental areas.

- (iii) is equal to 40% of the long-term average annual rainfall recharge to the Adelaide Fold Belt North Western Groundwater Source,

Note. At the commencement of this Plan the long-term average annual rainfall recharge for the Adelaide Fold Belt North Western Groundwater Source is estimated to be 50,635 megalitres per year.

- (iv) is equal to 100% of the annual recharge to the Lachlan Fold Belt North Western Groundwater Source, and

- (v) is within the groundwater storage of these fractured rock groundwater sources over the long-term.

- (b) it is the long-term average annual commitment of water as planned environmental water in:

- (i) the North Western Water Source that results from the application of the available water determination rules as specified in Division 2 of Part 6, the water allocation management rules as specified in Division 1 of Part 8 and the resulting long-term average annual extraction limit as specified in Division 1 of Part 6,
 - (ii) the Kanmantoo Fold Belt North Western Groundwater Source, which is equal to 40% of the long-term average annual rainfall recharge,
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- (iii) the Adelaide Fold Belt North Western Groundwater Source, which is equal to 40% of the long-term average annual rainfall recharge,
 - (iv) the Lachlan Fold Belt North Western Groundwater Source, which is equal to 100% of the annual recharge, and
 - (v) these fractured rock groundwater sources, which is equal to the volume of water within the groundwater storage over the long-term,
 - (c) it is the water remaining after water has been taken pursuant to basic landholder rights and access licences in these water sources, in accordance with the rules specified in Part 6 and Part 8 of this Plan.
- (3) The planned environmental water established under subclause (2) (a) is maintained in:
- (a) the North Western Water Source, by the rules specified in Division 2 of Part 8 of this Plan, and
 - (b) these fractured rock groundwater sources by the rules specified in Part 6 and Part 8 of this Plan.
- (4) The planned environmental water established under subclause (2) (b) is maintained in:
- (a) the North Western Water Source by the available water determination rules as specified in Division 2 of Part 6, the water allocation account management rules as specified in Division 1 of Part 8, and the resulting long-term average annual extraction limit as specified in Division 1 of Part 6, and
 - (b) these fractured rock groundwater sources by the rules in Part 6 which limit the water available for extraction under access licences.
- (5) The planned environmental water established under subclause (2) (c) is maintained in these water sources, by the rules specified in Part 6 and Part 8 of this Plan.

Note. The rules in Part 6 ensure that there will be water remaining in these water sources over the long-term by maintaining compliance with the long-term average annual extraction limit. The rules in Part 6 provide for a reduction in available water determinations when the long-term average annual extraction limit has been assessed to have been exceeded.

Part 5 Requirements for water

Division 1 General

16 Application

- (1) This Part identifies the requirements for water from these water sources for basic landholder rights (Division 2) and for extraction under access licences (Division 3).
- (2) The amounts of water specified in this Part represent the estimated water requirements of persons entitled to basic landholder rights in these water sources and the total volumes or unit shares to be specified in the share components of all access licences in these water sources. The actual volumes of water available for extraction in these water sources at any time will depend on factors such as climatic variability, access licence priority and the rules in this Plan.
- (3) This Plan recognises that basic landholder rights in these water sources and the total share components of all access licences authorised to extract water from these water sources may change during the term of this Plan. This Plan manages such changes by having provisions that manage the sharing of water within the limits of water availability, as provided for in Division 1 of Part 6 of this Plan.

Note. The total share components of access licences in these water sources may change during the term of this Plan as a result of:

- (a) the granting, surrender or cancellation of access licences in these water sources,
- (b) the variation of local water utility licences under section 66 of the Act, or
- (c) changes due to the volumetric conversion of *Water Act 1912* entitlements that are currently non-volumetric.

Division 2 Requirements for water for basic landholder rights

17 Domestic and stock rights

At the commencement of this Plan the water requirements of persons entitled to domestic and stock rights in these water sources are estimated to total 5,387 megalitres per year (hereafter *ML/year*), distributed as follows:

- (a) 809 ML/year in the North Western Water Source,
- (b) 2,182 ML/year in the Kanmantoo Fold Belt North Western Groundwater Source,
- (c) 2,396 ML/year in the Adelaide Fold Belt North Western Groundwater Source, and
- (d) 0 ML/year in the Lachlan Fold Belt North Western Groundwater Source.

Notes.

- 1 Domestic and stock rights are set out in Division 1 of Part 1 of Chapter 3 of the Act and must be exercised in accordance with any mandatory guidelines established under the Act with respect to the taking and use of water for domestic consumption or stock watering.
- 2 Inherent water quality and land use activities may make the water in some areas unsuitable for human consumption. Water from these water sources should not be consumed without first being tested and if necessary, appropriately treated. Such testing and treatment is the responsibility of the water user.

18 Native title rights

At the commencement of this Plan, there are no native title rights in these water sources. Therefore the water requirements for native title rights total 0 ML/year.

Note. A change in native title rights may occur pursuant to the provisions of the *Native Title Act 1993* (Cth).

19 Harvestable rights

The requirement for water under harvestable rights in these water sources is the total amount of water that owners or occupiers of landholdings are entitled to capture and store, pursuant to a harvestable rights order made under Part 1 of Chapter 3 of the Act.

Division 3 Requirements for water for extraction under access licences**20 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 take water from these water sources will total 42 ML/year, distributed as follows:

- (a) 29 ML/year in the Kanmantoo Fold Belt North Western Groundwater Source,

- (b) 13 ML/year in the Adelaide Fold Belt North Western Groundwater Source, and
- (c) 0 ML/year in the Lachlan Fold Belt North Western Groundwater Source.

21 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 take water from these water sources will total 0 ML/year.

22 Share components of unregulated river access licences

It is estimated that at the time of commencement of this Plan the share components of unregulated river access licences authorised to take water from the North Western Water Source will total 30 unit shares.

23 Share components of aquifer access licences

It is estimated that at the time of commencement of this Plan the share components of aquifer access licences authorised to take water from these water sources will total 35 unit shares, distributed as follows:

- (a) 19 unit shares in the Kanmantoo Fold Belt North Western Groundwater Source,
- (b) 16 unit shares in the Adelaide Fold Belt North Western Groundwater Source,
and
- (c) 0 unit shares in the Lachlan Fold Belt North Western Groundwater Source.

Part 6 Limits to the availability of water

Division 1 Long-term average annual extraction limits

24 General

The availability of water for extraction in these water sources on a long-term basis is to be managed in accordance with this Part.

25 Volume of the long-term average annual extraction limits

- (1) This clause establishes long-term average annual extraction limits for each of these water sources.

- (2) Subject to any variation under subclause (6), the long-term average annual extraction limit for the North Western Water Source is 2,807 megalitres (hereafter **ML**).

Note. The long-term average annual extraction limit for the North Western Water Source is equal to an estimate of 10% of average annual regional runoff in the area of this Plan. This estimate was calculated using a regional runoff model and historical rainfall records.

- (3) The long-term average annual extraction limit for the Kanmantoo Fold Belt North Western Groundwater Source is 27,930 ML.

Note. The long-term average annual extraction limit for the Kanmantoo Fold Belt North Western Groundwater Source is equal to the long-term average annual rainfall recharge minus the amount of recharge reserved as planned environmental water under clause 15 (2) (a) (ii).

- (4) The long-term average annual extraction limit for the Adelaide Fold Belt North Western Groundwater Source is 30,381 ML.

Note. The long-term average annual extraction limit for the Adelaide Fold Belt North Western Groundwater Source is equal to the long-term average annual rainfall recharge minus the amount of recharge reserved as planned environmental water under clause 15 (2)(a)(iii).

- (5) The long-term average annual extraction limit for the Lachlan Fold Belt North Western Groundwater Source is 0 ML.

- (6) Following the surrender and cancellation of an access licence in these water sources under sections 77 and 77A of the Act, the Minister may vary the respective long-term average annual extraction limit.

Note. Under Section 8F of the Act the long-term extraction limit is taken to be varied by the amount of

any change to the amount of water committed as licensed environmental water. Water committed as licensed environmental water is not to be accounted for as extraction. The variation in the long-term extraction limit is to be determined in accordance with a methodology approved by the Minister and published in the Gazette.

26 Calculation of current levels of annual extraction

- (1) After each water year, the total volume of water extracted during that water year under access licences and pursuant to domestic and stock rights and native title rights must be calculated for each of these water sources.
- (2) For the purpose of calculating the total volume of water extracted during a water year, the following must be taken into account:
 - (a) all water taken by holders of all categories of access licence in the water source, and
 - (b) all water taken pursuant to domestic and stock rights and native title rights in the water source.

27 Assessment of average annual extraction against the long-term average annual extraction limit

- (1) An assessment of average annual extractions against the long-term average annual extraction limit is to be conducted for each water source as set out in this clause.
- (2) For the North Western Water Source, commencing in the sixth water year in which this Plan has effect, the assessments referred to in subclause (1) must compare the long-term average annual extraction limit established in clause 25 (2) against the annual extraction averaged over the preceding five water years.
- (3) For these fractured rock groundwater sources, commencing in the fourth water year in which this Plan has effect, the assessments referred to in subclause (1) must compare the long-term average annual extraction limit established in clause 25 (3)–(5) against the annual extraction averaged over the preceding three water years.

28 Compliance with the long-term average annual extraction limit for the North Western Water Source

- (1) Compliance with the long-term average annual extraction limit established for the
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North Western Water Source is to be managed in accordance with this clause.

- (2) Commencing in the sixth water year in which this Plan has effect, if in the Minister's opinion the assessment under clause 27 demonstrates that annual extractions in the North Western Water Source averaged over the preceding five water years have exceeded the long-term average annual extraction limit for that water source by 5% or more, then the available water determination for unregulated river access licences in that water source is to be reduced in the following water year in accordance with subclause (3).
- (3) The reduction under subclause (2) is to be of an amount that is, in the Minister's opinion necessary to return average annual extractions in the water source to the long-term average annual extraction limit established in this Part.

29 Compliance with the long-term average annual extraction limits for these fractured rock groundwater sources

- (1) Compliance with the long-term average annual extraction limits established for these fractured rock groundwater sources is to be managed in accordance with this clause.
- (2) Commencing in the fourth water year in which this Plan has effect, if in the Minister's opinion the assessment under clause 27 demonstrates that annual extractions in these fractured rock groundwater sources averaged over the preceding three water years have exceeded the long-term average annual extraction limit for that water source by 5% or more, then the available water determination for aquifer access licences in that water source is to be reduced in the following water year in accordance with subclause (3).
- (3) The reduction under subclause (2) is to be of an amount that is, in the Minister's opinion necessary to return average annual extractions in the water source to the long-term average annual extraction limit established in this Part.

Division 2 Available water determinations

30 General

- (1) Available water determinations for access licences with a share component that specify one of these water sources are to be expressed as either:
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- (a) a percentage of share component for access licences which have share components specified as megalitres per year, or
 - (b) megalitres per unit share for access licences which have share components specified as a number of unit shares.
- (2) Subject to subclause (3), the sum of available water determinations made for any access licence with a share component that specifies one of these water sources must not, in any water year, exceed:
 - (a) 100% of the access licence share component or such lower amount that results from Division 1 of this Part, for all access licences with share components specified as megalitres per year, or
 - (b) 1 megalitre per unit share of the access licence share component or such lower amount that results from Division 1 of this Part, for all access licences with share components specified as a number of unit shares.
- (3) For the first water year in which this Plan has effect, subclause (2) does not apply to access licences with a share component that specifies the North Western Water Source.

31 Available water determinations made at the commencement of this Plan for access licences in the North Western Water Source

- (1) In making available water determinations under section 59 of the Act at the commencement of this Plan for access licences with share components that specify the North Western Water Source, the Minister should consider the rules in this clause.
 - (2) At the commencement of this Plan, the following available water determinations should be made for access licences with a share component that specifies the North Western Water Source:
 - (a) 200% of the access licence share component for domestic and stock access licences,
 - (b) 200% of the access licence share component for local water utility access licences, and
-

- (c) 2 megalitres per unit of share component for unregulated river access licences.

32 Available water determinations after the first water year of this Plan for access licences in the North Western Water Source

- (1) In making available water determinations under section 59 of the Act after the first water year in which this Plan has effect, for access licences with share components that specify the North Western Water Source, the Minister should consider the rules in this clause.
- (2) At the commencement of each water year after the first water year in which this Plan has effect, the following available water determinations should be made for access licences with a share component that specifies the North Western Water Source:
 - (a) 100% of the access licence share component for domestic and stock access licences,
 - (b) 100% of the access licence share component for local water utility access licences, and
 - (c) 1 megalitre per unit of share component for unregulated river access licences,

or such lower amount that results from Division 1 of this Part.

Note. Division 1 of this Part provides for available water determinations for unregulated river access licences to be reduced where the long-term average annual extraction limit for the water source has been assessed to have been exceeded, as per clauses 27 and 28.

33 Available water determinations for access licences in these fractured rock groundwater sources

- (1) In making available water determinations under section 59 of the Act for access licences with share components that specify these fractured rock groundwater sources, the Minister should consider the rules in this clause.
- (2) At the commencement of this Plan and at the commencement of each water year in which this Plan has effect, the following available water determinations should be made for access licences with a share component that specifies these fractured rock groundwater sources:

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- (a) 100% of the access licence share component for domestic and stock access licences,
- (b) 100% of the access licence share component for local water utility access licences, and
- (c) 1 megalitre per unit of share component for aquifer access licences,

or such lower amount that results from Division 1 of this Part.

Note. Division 1 of this Part provides for available water determinations for aquifer access licences to be reduced where the long-term average annual extraction limit for the water source has been assessed to have been exceeded, as per clauses 27 and 29.

Part 7 Rules for granting access licences

Notes.

- 1 This Part is made in accordance with sections 20, 61 and 63 of the Act.
- 2 Access licences granted in these water sources will be subject to mandatory conditions and discretionary conditions.

34 Specific purpose access licences

- (1) Applications for specific purpose access licences other than those permitted under the Regulation must not be made in these water sources.
- (2) A specific purpose access licence must not be granted in these water sources unless the Minister is satisfied that the share and extraction component of the access licence is the minimum required to meet the circumstances in which the access licence is proposed to be used.
- (3) An access licence of the subcategory “Aboriginal cultural” must not be granted in these water sources unless the share component of the proposed access licence is less than or equal to 10 ML/year.

35 Granting of access licences as a result of controlled allocation

The Minister may grant an access licence where the right to apply for the licence has been acquired in accordance with an order made under section 65 of the Act.

Part 8 Rules for managing access licences

Division 1 Water allocation account management rules

36 General

The rules in this Division apply to the taking of water under an access licence with a share component that specifies one of these water sources.

Note. The Act provides for the keeping of water allocation accounts. The rules in this Division impose further limits on the water that may be taken under an access licence over a specified period of time. These limits are in addition to any other limits on access licences for the taking of water contained in this Plan. For further clarification, these rules do not authorise the taking of more water than is credited to the respective water allocation account for the access licence at the time water is taken. It is an offence under the Act to take more water than is credited to the water allocation account for an access licence.

37 Individual access licence account management rules for the North Western Water Source

- (1) The rules in this clause apply to the taking of water under an access licence with a share component that specifies the North Western Water Source.
 - (2) For the period of the first three water years in which this Plan has effect, the maximum volume of water that may be taken under a domestic and stock access licence, a local water utility access licence or an unregulated river access licence in the North Western Water Source must not exceed a volume equal to:
 - (a) 50% of the water allocations accrued to the water allocation account for the access licence from available water determinations in the first water year, plus
 - (b) the sum of water allocations accrued to the water allocation account for the access licence from available water determinations in the second and third water years, plus
 - (c) the net amount of any water allocations assigned to or from the water allocation account for the access licence under section 71T of the Act in those water years, and
 - (d) any water allocations re-credited to the water allocation account for the access licence in accordance with section 76 of the Act in those water years.
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- (3) For the period of any three consecutive water years after the first water year in which this Plan has effect, the maximum volume of water that may be taken under a domestic and stock access licence, a local water utility access licence or an unregulated river access licence in the North Western Water Source must not exceed a volume equal to the lesser of:
- (a) the sum of:
 - (i) water allocations accrued to the water allocation account for the access licence from available water determinations in those three water years,
 - (ii) the water allocations carried over from the water year prior to those three water years under subclause (4),
 - (iii) the net amount of any water allocations assigned to or from the water allocation account for the access licence under section 71T of the Act in those three water years, and
 - (iv) any water allocations re-credited to the water allocation account for the access licence in accordance with section 76 of the Act in those three water years, or
 - (b) the sum of:
 - (i) the share component of the access licence at the beginning of the first of those three water years,
 - (ii) the share component of the access licence at the beginning of the second of those three water years,
 - (iii) the share component of the access licence at the beginning of the third of those three water years,
 - (iv) the net amount of any water allocations assigned to or from the water allocation account for the access licence under section 71T of the Act in those three water years, and
 - (v) any water allocations re-credited to the water allocation account for the access licence in accordance with section 76 of the Act in those three
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water years.

- (4) The maximum water allocation that can be carried over in the water allocation account for a domestic and stock access licence, a local water utility access licence or an unregulated river access licence in the North Western Water Source from one water year to the next is equal to:
 - (a) 100% of the access licence share component for access licences with share components expressed as ML/year, or
 - (b) 1 ML per unit share of access licence share component for access licences with share components expressed as a number of unit shares.

38 Individual access licence account management rules for these fractured rock groundwater sources

- (1) The rules in this clause apply to the taking of water under an access licence with a share component that specifies these fractured rock groundwater sources.
- (2) In any water year in which this Plan has effect, the maximum volume of water that may be taken under an access licence with a share component that specifies these fractured rock groundwater sources must not exceed a volume equal to:
 - (a) the sum of water allocations accrued to the water allocation account for the access licence from available water determinations in that water year, plus
 - (b) the net amount of any water allocations assigned to or from the water allocation account for the access licence under section 71T of the Act in that water year, plus
 - (c) any water allocations re-credited to the water allocation account for the access licence in accordance with section 76 of the Act in that water year.
- (3) Water allocations remaining in the water allocation account for an access licence in these fractured rock groundwater sources cannot be carried over from one water year to the next.

Division 2 Daily access rules

39 General

The rules in this Division apply to the taking of water under an access licence with a share component that specifies one of these water sources.

Note. Part 12 allows for amendments to be made to Division 2 of Part 8.

40 Access rules for the taking of surface water

- (1) This clause applies to the taking of water under an access licence with a share component that specifies the North Western Water Source excluding the taking of water under an access licence that nominates an aquifer interference approval and does not nominate a water supply work approval in the North Western Water Source.
- (2) Subject to subclause (6), water must not be taken under an access licence if there is no visible flow in the water source at the location at which water is proposed to be taken. This subclause does not apply to the taking of water from a natural pool, lagoon or lake that is not within a river or stream (regardless of stream size), is on a flood-runner or floodplain, or is on an effluent that only commences to flow during high flows.
- (3) Subject to subclause (6), water must not be taken under an access licence from a natural pool, lagoon or lake that is not within a river or stream (regardless of stream size), is on a flood-runner or floodplain, or is on an effluent that only commences to flow during high flows, when the water level in that pool, lagoon or lake is at less than 100% of its full containment volume.
- (4) Water must not be taken from an in-river dam pool unless the in-river dam is passing such flows as specified on the water supply work approval for the in-river dam.
- (5) The flows to be specified on the water supply work approval for the in-river dam referred to in subclause (4) are:
 - (a) the flows that were specified in conditions on the *Water Act 1912* entitlement that the approval replaces, or
 - (b) where no flows were specified, the amount of flows determined by the Minister.

- (6) Subclauses (2) and (3) do not apply to the following:
- (a) the taking of water under an access licence to which clause 1 of Schedule 2 applies, for any of the purposes listed below, provided that the volume of water taken does not exceed 20 kilolitres per day per access licence or such lower amount specified on the access licence in accordance with subclause (7):
 - (i) fruit washing,
 - (ii) cleaning of dairy plant and equipment for the purpose of hygiene,
 - (iii) poultry watering and misting, or
 - (iv) cleaning of enclosures used for intensive animal production for the purposes of hygiene,
 - (b) the taking of water for domestic consumption only under a domestic and stock access licence or a domestic and stock (subcategory “domestic”) access licence that existed at the commencement of this Plan, provided that the volume of water taken does not exceed 1 kilolitre per house supplied by the access licence per day,
 - (c) the taking of water for stock watering only under a domestic and stock access licence or a domestic and stock (subcategory “stock”) access licence that existed at the commencement of this Plan, for the first five years of this Plan, provided the volume of water taken does not exceed 14 litres per hectare of grazeable area per day,
 - (d) the taking of water using a runoff harvesting dam or from an in-river dam pool, and
 - (e) the taking of water under a local water utility access licence or an access licence of the subcategory “Town water supply” to which clause 2 of Schedule 2 applies.
- (7) The Minister may amend a water supply work approval to reduce the maximum daily volume limit imposed by the rule under subclause (6) (a) if the Minister is satisfied that the reduced volume is satisfactory to meet the purpose referred to in subclause (6)
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(a).

Note. Part 12 of this Plan allows for amendments to be made to clause 40.

41 Total daily extraction limits

At the commencement of this Plan, total daily extraction limits (hereafter *TDELs*) are not established for any access licences in these water sources.

Notes.

- 1 TDELs are an assessment tool only and will be used by the NSW Office of Water to determine which access licences (if any) may require individual daily extraction limits. However, continued exceedance of a TDEL may result in the imposition of individual daily extraction limits under clause 42.
- 2 Part 12 of this Plan allows for amendments to be made to establish TDELs.

42 Individual daily extraction limits

- (1) At the commencement of this Plan, there are no individual daily extraction limits (hereafter *IDELs*) established for access licences in these water sources.
- (2) If the Minister is satisfied that an assessment of daily extraction under access licences for which a TDEL is established under clause 41 indicates that extraction under the access licences exceeds the TDEL, the Minister may amend the extraction component of an access licence under section 68A of the Act to impose an IDEL on any one or more of those access licences.

Note. Part 12 of this Plan allows for amendments to be made to establish IDELs.

Part 9 Rules for water supply work approvals

Note. This Part is made in accordance with sections 5, 21 and 95 of the Act.

Division 1 Rules applying to water supply works that take surface water

43 General

The rules in this Division apply to water supply work approvals for water supply works that may be used to take water from the North Western Water Source.

44 Granting or amending water supply work approvals

- (1) The Minister may amend a water supply work approval for a runoff harvesting dam or an in-river dam if the sum of the share components of access licences nominating that water supply work approval is reduced via:
- (a) a dealing,
 - (b) the surrender under section 77 of the Act and then the cancellation under 77A (6) of the Act of an access licence,
 - (c) the amendment of the share component of the access licence by the Minister under section 68A, or
 - (d) the cancellation of an access licence under section 78 of the Act or via the compulsory acquisition of an access licence under section 79 of the Act,

to require the modification or removal of that dam in accordance with requirements as specified by the Minister by notice in writing to ensure that the capability of the dam to capture runoff is reduced to reflect that reduction in share component.

Notes.

- 1 **Runoff harvesting dam** is defined in the Dictionary.
- 2 Water supply work approvals may be granted or amended for in-river dams on third order or higher streams within all water sources and management zones to which this Plan applies, consistent with the principles of the Act.
- 3 **Stream order** and **in-river dam** are defined in the Dictionary.

- (2) A water supply work approval must not be granted or amended for a water supply
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work, which in the Minister's opinion, is being used to take water from the hydrological catchment of Coopers Creek.

Note. Part 12 allows for amendments to be made to clause 44.

Division 2 Rules applying to water supply works that take water from these fractured rock groundwater sources

45 General

- (1) The rules in this Division apply to water supply work approvals for water supply works that may be used to take water from these fractured rock groundwater sources.
- (2) In this Division, a reference to a water supply work is limited to a water supply work that may be used to take water from these fractured rock groundwater sources.

46 Rules for amending water supply work approvals for replacement groundwater works

- (1) The Minister may amend a water supply work approval to alter the water supply work to which the approval relates if the Minister is satisfied that the amendment is to authorise a replacement groundwater work.
- (2) For the purposes of this Plan, ***replacement groundwater work*** means a water supply work that replaces an existing water supply work constructed and used for the purpose of taking water from an aquifer where:
 - (a) the existing water supply work is authorised by a water supply work approval under the Act,
 - (b) the replacement groundwater work is to be constructed to extract water from the same water source as the existing water supply work,
 - (c) the replacement groundwater work is to be constructed to extract water from:
 - (i) the same depth as the existing water supply work, or
 - (ii) a different depth if the Minister is satisfied that doing so will result in no greater impact on a water source or its dependent ecosystems,

- (d) the replacement groundwater work is to be located:
 - (i) within 20 metres of the existing water supply work, or
 - (ii) more than 20 metres from the existing water supply work if the Minister is satisfied that doing so will result in no greater impact on a water source or its dependent ecosystems,
 - (e) the existing water supply work is located within 40 metres of the high bank of a river and the replacement groundwater work is to be located:
 - (i) within 20 metres of the existing water supply work but no closer to the high bank of the river, or
 - (ii) more than 20 metres from the existing water supply work but no closer to the high bank of the river if the Minister is satisfied that doing so will result in no greater impact on a water source or its dependent ecosystems, and
 - (f) the replacement groundwater work must not have a greater internal diameter or excavation footprint than the existing water supply work, except where the internal diameter of the casing of the existing water supply work is no longer manufactured, in which case the internal diameter of the replacement groundwater work is to be no greater than 110% of the internal diameter of the existing water supply work it replaces. For the purposes of this paragraph, *internal diameter* means the diameter of the inside of the casing of the water supply work which is a water bore and *excavation footprint* means the authorised dimensions of a water supply work which is an unlined excavation constructed for the purposes of water supply only.
- (3) For the purposes of subclause (2) (c) (ii), the Minister may require the applicant to submit a hydrogeological study, assessed as adequate by the Minister, to demonstrate that the construction of the water supply work at a different depth to the existing water supply work will result in no greater impact on a water source or its dependent ecosystems.
- (4) For the purposes of subclauses (2) (d) (ii) or (e) (ii), the Minister may require the applicant to submit a hydrogeological study, assessed as adequate by the Minister, to
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demonstrate that the location of the water supply work at a distance greater than 20 metres from the existing water supply work will result in no greater impact on a water source or its dependent ecosystems.

Notes.

- 1 The Minister may amend an approval on the application of the holder of the approval, under section 107 of the Act. The operation of section 107 (3) of the Act may further restrict the replacement of an existing water supply work.
- 2 Part 12 allows for amendments to be made to clause 46.

47 Rules to minimise interference between water supply works

- (1) A water supply work approval must not be granted or amended to authorise the construction of a water supply work which, in the Minister's opinion, is located within:
 - (a) 400 metres of a water supply work authorised to take water from the same water source that is nominated by another access licence on another landholding,
 - (b) 200 metres of a water supply work authorised to take water from the same water source pursuant to basic landholder rights on another landholding,
 - (c) 100 metres from the boundary of the land on which the water supply work is located, unless the landholder of the land adjoining the boundary has provided consent in writing,
 - (d) 500 metres of a water supply work authorised to take water from the same water source by a local water utility or a major utility, unless the local water utility or major utility has provided consent in writing, or
 - (e) 400 metres of a NSW Office of Water observation or monitoring bore, unless the Minister has provided consent in writing.
- (2) The distance restrictions specified in subclause (1) in relation to the grant or amendment of a water supply work approval do not apply if the Minister is satisfied that:
 - (a) the water supply work is solely for basic landholder rights,

- (b) the water supply work is a replacement groundwater work,
 - (c) the water supply work is for the purpose of monitoring, environmental management or remedial works, or
 - (d) the location of the water supply work would result in no more than minimal impact on existing extractions within these water sources.
- (3) The Minister may request the applicant to undertake a hydrogeological study, submitted by the applicant and assessed as adequate by the Minister, to demonstrate that for the purpose of subclause (2) (d), the location of the water supply work at a lesser distance would result in no greater impact on existing extractions within these water sources.
- (4) An approval granted under subclause (2) (d) must be subject to a requirement that, when directed by the Minister by notice in writing, the approval holder must carry out all actions required by the Minister and specified in the notice to minimise the impact of the water supply work on existing water levels or extraction, if the Minister is satisfied that the location of the water supply work is causing more than minimal impact on existing water levels or extraction.

Note. Part 12 allows for amendments to be made to clause 47.

48 Rules for water supply works located near contamination sources

- (1) A water supply work approval shall not be granted or amended to authorise the construction of a water supply work which, in the Minister's opinion, is located:
 - (a) within 250 metres of the plume associated with a contamination source listed in Schedule 3,
 - (b) between 250 metres and 500 metres of the plume associated with a contamination source listed in Schedule 3, unless the Minister is satisfied that no drawdown of water will occur within 250 metres of the plume associated with the contamination source, or
 - (c) at a distance specified by the Minister that is more than 500 metres from the plume associated with a contamination source listed in Schedule 3, if a greater distance is determined by the Minister to be necessary to protect the water
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source, the environment or public health and safety.

- (2) The distance restrictions specified in subclause (1) in relation to the grant or amendment of a water supply work approval do not apply if the Minister is satisfied that:
 - (a) the distance is adequate to protect the water source, its dependent ecosystems and public health and safety, or
 - (b) the water supply work is for the purpose of monitoring, environmental management or remedial works.
- (3) The Minister may request the applicant to undertake a hydrogeological study, submitted by the applicant and assessed as adequate by the Minister, to demonstrate that for the purpose of subclause (2) (a), the location of the water supply work at a lesser distance would result in no greater impact on dependent ecosystems and public health and safety.

49 Rules for water supply works located near sensitive environmental areas

- (1) A water supply work approval shall not be granted or amended to authorise the construction of a water supply work which, in the Minister's opinion, is located:
 - (a) within 2,000 metres of a high priority groundwater dependent ecosystem listed in clause 1 of Schedule 4 in the case of a water supply work used solely to take water pursuant to basic landholder rights,
 - (b) within 2,000 metres of a high priority groundwater dependent ecosystem listed in clause 1 of Schedule 4 in the case of a water supply work not used solely to take water pursuant to basic landholder rights,
 - (c) at a distance specified by the Minister that is more than 2,000 metres from a high priority groundwater dependent ecosystem listed in clause 1 of Schedule 4, excluding water supply works used solely to take water pursuant to basic landholder rights, if the Minister is satisfied that the water supply work is likely to cause more than minimal drawdown at the perimeter of any groundwater dependent ecosystem listed in clause 1 of Schedule 4,

- (d) within 500 metres of any high priority karst environment groundwater dependent ecosystem listed in clause 2 of Schedule 4 for water supply works used solely to take water pursuant to basic landholder rights,
- (e) within 500 metres of any high priority karst environment groundwater dependent ecosystem listed in clause 2 of Schedule 4 for water supply works not used solely to take water pursuant to basic landholder rights,
- (f) at a distance specified by the Minister that is more than 500 metres from any high priority karst environment groundwater dependent ecosystem listed in clause 2 of Schedule 4, excluding water supply works used solely for basic landholder rights, if the Minister is satisfied that the water supply work is likely to cause more than minimal drawdown at the perimeter of any groundwater dependent ecosystem listed in clause 2 of Schedule 4,
- (g) within 40 metres of the top of the high bank of any 3rd order or higher river or stream, or
- (h) within 100 metres from the edge of an escarpment, where the location of the water supply work is to be above the escarpment.

Note. *Escarpment* is defined in the Dictionary.

- (2) The distance restrictions specified in subclause (1) (a) and (b) in relation to the grant or amendment of a water supply work approval do not apply if:
 - (a) the Minister is satisfied that no more than minimal drawdown of water will occur at the perimeter of any groundwater dependent ecosystem in clause 1 of Schedule 4, and
 - (b) water is piped to a distance that is more than 2,000 metres from the groundwater dependent ecosystem in clause 1 of Schedule 4.
 - (3) The distance restrictions specified in subclause (1) in relation to the grant or amendment of a water supply work approval do not apply if the Minister is satisfied that:
 - (a) the water supply work is for the purpose of monitoring, environmental management or remedial works,
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- (b) the water supply work replaces an existing water supply work that is part of a bore network for a major utility or a local water utility for the purpose of town water supply,
 - (c) the water supply work is a replacement groundwater work, or
 - (d) that the location of the water supply work at a lesser distance would result in no greater impact on these water sources and their groundwater dependent ecosystems.
- (4) The Minister may request the applicant to undertake a hydrogeological study, submitted by the applicant and assessed as adequate by the Minister, to demonstrate that:
 - (a) for the purpose of subclause (2) (a), no more than minimal drawdown of water will occur at the perimeter of any groundwater dependent ecosystem listed in Schedule 4, or
 - (b) for the purposes of subclause (4) (d), the location of the water supply work at a lesser distance would result in no greater impact on these groundwater sources and any groundwater dependent ecosystems listed in Schedule 4.

Note. Part 12 allows for amendments to be made to clause 49.

50 Rules for water supply works located near groundwater dependent culturally significant sites

- (1) A water supply work approval must not be granted or amended to authorise the construction of a water supply work which, in the Minister's opinion, is located within:
 - (a) 100 metres of a groundwater dependent culturally significant site in the case of a water supply work used solely to take water pursuant to basic landholder rights, or
 - (b) 200 metres of a groundwater dependent culturally significant site in the case of a water supply work not used solely to take water pursuant to basic landholder rights.
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- (2) The distance restrictions specified in subclause (1) in relation to the grant or amendment of a water supply work approval do not apply if the Minister is satisfied that:
- (a) the water supply work is for the purpose of monitoring, environmental management or remedial works,
 - (b) the water supply work replaces an existing water supply work that is part of a bore network for a major utility or a local water utility for the purpose of town water supply,
 - (c) the water supply work is sealed off to the nearest impervious layer above the slotted intervals of the water supply work with an impermeable seal constructed between the casing and the bore hole in accordance with any requirements specified by the Minister,
 - (d) the water supply work is a replacement groundwater work, or
 - (e) the location of the water supply work at a lesser distance would result in no more than minimal impact on these water sources and their groundwater dependent culturally significant sites.
- (3) The Minister may request the applicant to undertake a hydrogeological study, submitted by the applicant and assessed as adequate by the Minister, to demonstrate that for the purpose of subclause (2) (e), the location of the water supply work at a lesser distance would result in no greater impact on these water sources and their groundwater dependent culturally significant sites.

Note. Culturally significant sites will be identified as a part of the assessment undertaken by the NSW Office of Water during the processing of an application for the granting or amending of a water supply work approval.

51 Rules for the use of water supply works located within restricted distances

- (1) Subject to subclauses (2) and (3), a water supply work that is located within a restricted distance specified in clauses 47–50 must not, in any water year, be used to take more water than the volume of water that is equal to the sum of the share components of the access licences nominating that water supply work at the commencement of this Plan.

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- (2) Subject to subclause (3), a water supply work that becomes located within a restricted distance specified in clauses 47–50, as a result of an amendment to this Plan, must not, in any water year, be used to take more water than the volume of water that is equal to the sum of share components of access licences nominating that water supply work at the date of the amendment.
- (3) Subclauses (1) and (2) do not apply where a restricted distance does not apply in accordance with clause 47 (2), 48 (2), 49 (2) and (3) or 50 (2).

Note. The water quality from any bore can be affected by land use activities and inherent water quality in the aquifer. Water quality cannot be guaranteed and may be unsuitable for human consumption and other uses. The quality of water extracted should be tested before being used and appropriately treated. Such testing and treatment is the responsibility of the licence holder.

Note. Part 12 allows for amendments to be made to clause 51.

Part 10 Access licence dealing rules

52 General

The access licence dealing rules established in this Part apply to all access licence dealings in these water sources.

Notes.

- 1 Access licence dealings in these water sources are subject to the provisions of the Act, the regulations, the access licence dealing principles and the access licence dealing rules established in this Part.
- 2 The access licence dealing principles prevail over the access licence dealing rules in this Plan to the extent of any inconsistency, as provided under section 71Z (3) of the Act.

53 Conversion of access licence to new category

- (1) This clause relates to dealings under section 71O of the Act in these water sources.
- (2) Dealings under section 71O of the Act are prohibited in these water sources.

54 Assignment of rights dealings (within water sources)

- (1) This clause relates to dealings under section 71Q of the Act in these water sources.
- (2) Dealings under section 71Q of the Act are prohibited if the dealing involves an assignment of rights from an access licence that does not nominate a water supply work located in the hydrological catchment of Coopers Creek in the North Western Water Source to an access licence that nominates a water supply work located in the hydrological catchment of Coopers Creek in the North Western Water Source.

55 Amendment of share component dealings (change of water source)

- (1) This clause relates to dealings under section 71R of the Act in these water sources.
- (2) Dealings under section 71R of the Act are prohibited in these water sources.

56 Amendment of extraction component dealings

- (1) This clause relates to dealings under section 71S of the Act in these water sources.
 - (2) Dealings under section 71S of the Act are prohibited in these water sources.
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57 Assignment of water allocations dealings

- (1) This clause relates to dealings under section 71T of the Act in these water sources.
- (2) Dealings within a water source under section 71T of the Act are prohibited if the dealing involves an assignment of water allocation from an access licence that does not nominate a water supply work located in the hydrological catchment of Coopers Creek in the North Western Water Source to an access licence that does nominate a water supply work located in the hydrological catchment of Coopers Creek in the North Western Water Source.
- (3) Dealings between water sources under section 71T of the Act are prohibited in these water sources.

58 Interstate transfer of access licences and assignment of water allocation

- (1) This clause relates to dealings under section 71U or 71V of the Act in these water sources.
- (2) Subject to subclause (3), dealings involving the interstate transfer of an access licence to or from these water sources may only be permitted where administrative arrangements have been agreed to and put in place by the States.
- (3) Dealings involving the interstate transfer of an access licence to these water sources are prohibited if the dealing involves any of the following:
 - (a) the granting of a new access licence with a share component that specifies the North Western Water Source, unless the dealing involves the cancellation of an access licence from another State or its corresponding equivalent that permits the taking of water from the hydrological catchment of Lake Frome or the hydrological catchment of Bulloo,
 - (b) the granting of a new access licence that nominates a water supply work located in the hydrological catchment of Coopers Creek,
 - (c) the granting of a new access licence with a share component that specifies the Kanmantoo Fold Belt North Western Groundwater Source, unless the dealing involves the cancellation of an access licence from another State or its

corresponding equivalent that permits the taking of water from the Kanmantoo Fold Belt,

- (d) the granting of a new access licence with a share component that specifies the Adelaide Fold Belt North Western Groundwater Source, unless the dealing involves the cancellation of an access licence from another State or its corresponding equivalent that permits the taking of water from the Adelaide Fold Belt, or
 - (e) the granting of a new access licence with a share component that specifies the Lachlan Fold Belt North Western Groundwater Source, unless the dealing involves the cancellation of an access licence from another State or its corresponding equivalent that permits the taking of water from the Lachlan Fold Belt.
- (4) Subject to subclause (5), dealings involving the interstate assignment of water allocations to or from access licences in these water sources may only be permitted where administrative arrangements have been agreed to and put in place by the States.
- (5) Dealings involving the interstate assignment of water allocations to access licences in these water sources are prohibited if the dealing involves an assignment of water allocation:
- (a) to an access licence in the North Western Water Source, unless the assignment of water allocation is from an access licence from another State or its corresponding equivalent that permits the taking of water from the hydrological catchment Lake Frome or the hydrological catchment of Bulloo,
 - (b) to a new access licence that nominates a water supply work located in the hydrological catchment of Coopers Creek,
 - (c) to an access licence in the Kanmantoo Fold Belt North Western Groundwater Source, unless the assignment of water allocation is from an access licence from another State or its corresponding equivalent that permits the taking of water from the Kanmantoo Fold Belt,
 - (d) to an access licence in the Adelaide Fold Belt North Western Groundwater Source, unless the assignment of water allocation is from an access licence from
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another State or its corresponding equivalent that permits the taking of water from the Adelaide Fold Belt, or

- (e) to an access licence in the Lachlan Fold Belt North Western Groundwater Source, unless the assignment of water allocation is from an access licence from another State or its corresponding equivalent that permits the taking of water from the Lachlan Fold Belt.

59 Nomination of water supply works dealings

- (1) This clause relates to dealings under section 71W of the Act in these water sources.
 - (2) Dealings under section 71W of the Act are prohibited if the dealing involves an access licence that does not nominate a water supply work located in the hydrological catchment of Coopers Creek in the North Western Water Source being amended to nominate a water supply work located in the hydrological catchment of Coopers Creek in the North Western Water Source.
 - (3) Dealings under section 71W of the Act that involve the interstate nomination of water supply works by access licences in these water sources may only be permitted where administrative arrangements have been agreed to and put in place by the States.
 - (4) Subject to subclause (5), dealings under section 71W of the Act that involve the nomination of water supply works in these water sources by an access licence from another State or its corresponding equivalent may only be permitted where administrative arrangements have been agreed to and put in place by the States.
 - (5) Dealings under section 71W of the Act that involve the nomination of water supply works in these water sources by an access licence from another State or its corresponding equivalent are prohibited if the dealing involves:
 - (a) the nomination of a water supply work located in the North Western Water Source, unless the dealing involves an access licence from another State or its corresponding equivalent that permits the taking of water from the hydrological catchment of Lake Frome or the hydrological catchment of Bulloo, or
 - (b) the nomination of a water supply work located in the hydrological catchment of Coopers Creek.
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- (c) the nomination of a water supply work located in the Kanmantoo Fold Belt North Western Groundwater Source, unless the dealing involves an access licence from another State or its corresponding equivalent that permits the taking of water from the Kanmantoo Fold Belt,
- (d) the nomination of a water supply work located in the Adelaide Fold Belt North Western Groundwater Source, unless the dealing involves an access licence from another State or its corresponding equivalent that permits the taking of water from the Adelaide Fold Belt, or
- (e) the nomination of a water supply work located in the Lachlan Fold Belt North Western Groundwater Source, unless the dealing involves an access licence from another State or its corresponding equivalent that permits the taking of water from the Lachlan Fold Belt.

Part 11 Mandatory conditions

Division 1 General

60 General

In this Part:

- (a) a requirement to notify the Minister in writing is satisfied by making a notification in writing to one of the addresses listed in Appendix 2 of this Plan or to the email address for the NSW Office of Water Licensing Enquiries Information Centre,

Note. At the commencement of this Plan, the email address for the NSW Office of Water Licensing Enquiries Information Centre is information@water.nsw.gov.au.

- (b) a ***metered water supply work with a data logger*** means a water supply work with a data logger and a meter that complies with the *ATS 4747 Australian Technical Specification: Meters for non-urban water supply* as may be updated and replaced from time to time, and

Note. The definition of a ***metered water supply work with a data logger*** does not include all water supply works that are metered or that have a data logger. The water supply work must meet the parameters of this definition for the water supply work to be a ***metered water supply work with a data logger***.

- (c) if the holder of a water supply work approval is the same holder of the access licence under which water is proposed to be taken, then its not necessary to maintain two separate Logbooks and all the required information can be kept in one Logbook.

Division 2 Access licences

Note. This Division is made in accordance with sections 17 (c), 20 and 66 of the Act.

61 General

- (1) Access licences in these water sources must have mandatory conditions where required to give effect to the following:
- (a) the relevant water allocation account management rules specified in Division 1 of Part 8 of this Plan for the respective category or subcategory of access
-

licence,

- (b) water must not be taken under an access licence otherwise than in compliance with the conditions applying to the water supply work approval for the water supply work through which water is to be taken,
 - (c) the holder of an access licence must notify the Minister, in writing, immediately upon becoming aware of a breach of any conditions of the licence, and
 - (d) any other conditions required to implement the provisions of the Plan.
- (2) Access licences in these water sources, excluding access licences that nominate only metered water supply works with a data logger, must have mandatory conditions where required to give effect to the following:
 - (a) the holder of an access licence must keep a Logbook,
 - (b) the holder of an access licence must record the following in the Logbook:
 - (i) each date and period of time during which water was taken under the access licence,
 - (ii) the volume of water taken on that date,
 - (iii) the water supply work approval number of the water supply work used to take the water on that date,
 - (iv) the purpose or purposes for which the water taken on that date,
 - (v) for domestic and stock access licences, local water utility access licences and unregulated river access licences in the North Western Water Source, the volume of water taken in the first three water years in which this Plan has effect, by comparison to the maximum volume of water permitted to be taken in those years under clause 37 (2),
 - (vi) for domestic and stock access licences, local water utility access licences and unregulated river access licences in the North Western Water Source, the volume of water taken in any three consecutive water years after the first water year in which this Plan has effect, by comparison to the

maximum volume of water permitted to be taken in those years under clause 37 (3),

- (vii) for domestic and stock access licences, local water utility access licences and aquifer access licences in these fractured rock groundwater sources, the volume of water taken in any water year in which this Plan has effect, by comparison to the maximum volume of water permitted to be taken in that water year under clause 38 (2), and
 - (viii) any other information required to be recorded in the Logbook under the rules of this Plan,
- (c) the holder of an access licence must produce the Logbook to the Minister for inspection, when requested, and
 - (d) the holder of an access licence must retain the information required to be recorded in the Logbook for 5 years from the date to which that information relates.
- (3) When directed by the Minister by notice in writing, the holder of an access licence that nominates only a metered water supply work with a data logger must keep a Logbook in accordance with an requirements from subclause (2) that are specified in the notice.
 - (4) All access licences of the subcategory “Aboriginal cultural” must have a mandatory condition that specifies that water must only be taken under the access licence by Aboriginal persons or Aboriginal communities for personal, domestic or communal purposes, including drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, gathering and for recreational, cultural and ceremonial purposes.
 - (5) An access licence for a project under Part 3A of the *Environmental Planning and Assessment Act 1979* must have mandatory conditions where required to give effect to the relevant access rules for the taking of water specified in clause 51 and Division 2 of Part 8 of this Plan.

Division 3 Water supply work approvals

Note. This Division is made in accordance with sections 17 (c) and 100 of the Act.

62 General

(1) Water supply work approvals for water supply works in these water sources must have mandatory conditions where required to give effect to the following:

- (a) the water supply work must not be used to take water under an access licence unless in compliance with the relevant access rules for the taking of water as specified in Division 2 of Part 8 of this Plan,
- (b) when directed by the Minister by notice in writing, the approval holder must have metering equipment installed that meets the following requirements:
 - (i) the metering equipment must accurately measure and record the flow of all water taken through the water supply work,
 - (ii) the metering equipment must comply with the *ATS 4747 Australian Technical Specification: Meters for non-urban water supply* as may be updated or replaced from time to time,
 - (iii) the metering equipment must be operated and maintained in a proper and efficient manner at all times,
 - (iv) the metering equipment must be sited and installed at a place in the pipe, channel or conduit between the water source and the first discharge outlet. There must be no flow of water into or out of the pipe, channel or conduit between the water source and the metering equipment, and
 - (v) any other requirements as to type, standard or other criteria for the metering equipment specified in the notice, and

Note. The Minister may direct a landholder or person to install, replace or to properly maintain metering equipment under section 326 of the Act.

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

(2) Water supply work approvals for water supply works in these water sources,

excluding water supply work approvals for metered water supply works with a data logger, must have mandatory conditions where required to give effect to the following:

- (a) the holder of a water supply work approval must keep a Logbook,
 - (b) the holder of a water supply work approval must record the following in the Logbook:
 - (i) each date and period of time during which water was taken using the water supply work,
 - (ii) the volume of water taken on that date,
 - (iii) the access licence number of the access licence under which water was taken on that date or if water was taken under some other authority (such as basic landholder rights), the authority under which water was taken,
 - (iv) the purpose or purposes for which the water was taken on that date,
 - (v) details of any cropping carried out using the water taken through the water supply work including the type of crop, area cropped and dates of planting and harvesting,
 - (vi) where metering equipment has been installed for use in connection with the water supply work, the meter reading before water is taken,
 - (vii) where metering equipment has not been installed for use in connection with the water supply work, details of all pumping activities for the water supply work including pump running hours, pump power usage or pump fuel usage, pump start and stop times and pump capacity per unit of time, and
 - (viii) any other information required to be recorded in the Logbook under the rules of this Plan,
 - (c) the holder of a water supply work approval, excluding water supply work approvals for metered water supply works, must produce the Logbook to the Minister for inspection, when requested, and
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- (d) the holder of a water supply work approval, excluding water supply work approvals for metered water supply works, must retain the information required to be recorded in the Logbook for five years from the date to which that information relates.
- (3) All water supply works, except those authorising water supply works taking water from these fractured rock groundwater sources must contain mandatory conditions to require that the water supply work must not be used to take water unless, before water is taken, the holder of the water supply work approval confirms that *cease to take conditions* do not apply. Where the holder is required to keep a Logbook, the holder must record that confirmation and the means of confirmation (such as visual inspection or internet search), in the Logbook. In this paragraph ***cease to take conditions*** means any condition on the water supply work approval or on the access licence under which water is proposed to be taken, that prohibits the taking of water in a particular circumstance.
- (4) Water supply work approvals for runoff harvesting dams and in-river dams must have a mandatory condition where required to give effect to clause 44 (1).
- (5) A water supply work approval for a replacement groundwater work must have mandatory conditions to give effect to the requirements for a replacement groundwater work specified in or specified by the Minister in accordance with clause 46.

63 Water supply works used to take water from these fractured rock groundwater sources

- (1) This clause applies to all water supply work approvals for water supply works that may be used to take water contained within these fractured rock groundwater sources.
- (2) Water supply work approvals to which this clause applies must have mandatory conditions where required to give effect to the following:
 - (a) the rules for limiting the taking of water within the distance restrictions as specified in clause 51,
 - (b) the approval holder must ensure the water supply work is constructed so as to be:
 - (i) screened in the groundwater source nominated by the access licence, and

- (ii) sealed off from all other water sources to the Minister's satisfaction,
- (c) the construction of a new water supply work must:
 - (i) comply with the distance restrictions specified in or specified by the Minister in accordance with, clauses 47 to 50,
 - (ii) comply with the construction standards prescribed for the relevant type of bore in the *Minimum Construction Requirements for Water Bores in Australia*, 2003, ISBN 1 9209 2009 9, as may be amended from time to time or any standards which supersede those standards, and
 - (iii) be constructed appropriately so as to prevent contamination between the aquifers,
- (d) the approval holder must ensure that if the water supply work is abandoned or replaced, it is decommissioned in compliance with the "minimum requirements for decommissioning bores" prescribed in the *Minimum Construction Requirements for Water Bores in Australia*, 2003, ISBN 1 9209 2009 9, as amended or replaced from time to time, unless otherwise directed by the Minister in writing,
- (e) within two months of the decommissioning of the water supply work, the approval holder must notify the Minister in writing that the water supply work has been decommissioned,
- (f) the approval holder must, within two months of completion of the construction of the water supply work or within two months after the issue of the water supply work approval if the water supply work is existing, submit to the NSW Office of Water the approved form completed with all relevant details, including:
 - (i) the name and licence number of the driller who constructed the water supply work,
 - (ii) the details of geology and construction as required by the approved form,
 - (iii) details of the location of the water supply work on a copy of the lot and

- deposited plan of the land, its geographical reference accurate to ± 5 metres and the respective distance(s) of the water supply work from the property boundaries, and
- (iv) if the Minister has requested any water analysis and/or pumping tests to be carried out, details of the water analysis and/or pumping tests required by the Minister,
 - (g) if, during the construction of the water supply work, saline or contaminated water is encountered above the production aquifer, the approval holder must:
 - (i) notify the Minister within 48 hours of becoming aware of the contaminated water,
 - (ii) take all reasonable steps to minimise contamination and environmental harm,
 - (iii) ensure that such water is sealed off by inserting casing to a depth sufficient to exclude the saline or contaminated water from the water supply work and if specified by the Minister, place an impermeable seal between the casing(s) and the walls of the water supply work from the bottom of the casing to ground level as specified by the Minister, and
 - (iv) if the Minister has specified any other requirements, comply with any requirements specified by the Minister in writing,
 - (h) when directed by the Minister by notice in writing, the approval holder must provide a report in the form specified in the notice detailing the quality of any water obtained using the water supply work,
 - (i) the water supply work approval will lapse if the construction of the water supply work is not completed within three years of the issue of the water supply work approval, and
 - (j) any other conditions required to implement the provisions of this Plan.
- (3) A water supply work approval granted under clause 47 (2) (d), must have a mandatory condition to give effect to clause 47 (4).
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Note. Part 12 of this Plan allows for amendments to be made to clause 63.

Part 12 Amendment of this Plan

64 General

- (1) Amendments specified throughout this Plan and in this Part, are amendments authorised by this Plan.
- (2) Where an amendment is authorised by this Plan, that authorisation includes any consequential amendments required to be made to this Plan to give effect to that particular amendment.

Note. For example, if Part 1 is amended to add a new management zone, this may require amendment to other parts of this Plan to include rules for that management zone

- (3) An amendment authorised by this Plan which results in a variation of the bulk access regime, is an amendment authorised by this Plan for the purposes of sections 87 (2) (c) and 87AA of the Act.

65 Part 1

Part 1 may be amended to do any of the following:

- (a) apply this Plan to new or additional water sources or water management areas (including part thereof) or modify (including to amend the boundaries included in this Plan) or remove an existing water source or water management area (including part thereof),
- (b) add, remove or modify a management zone, including the water sources to which a management zone applies and the boundaries of such a zone,
- (c) add, remove or modify an extraction management unit, including the water sources to which an extraction management unit applies, and
- (d) amend the Registered Map.

66 Part 4

Part 4 may be amended to vary the amount of recharge reserved as planned environmental water as a result of recharge studies undertaken or assessed as adequate

by the Minister.

67 Part 6

Part 6 may be amended to modify the long-term average annual extraction limits as a result of recharge studies undertaken or assessed as adequate by the Minister.

68 Part 8

Division 2 of Part 8 of this Plan may be amended to do any of the following:

- (a) establish new or additional flow classes in any water source where management zones are added or in any water source or management zone that is amended, during the term of this Plan as specified in clause 65,
- (b) amend clause 40:
 - (i) subclause (1) in relation to the exclusion of aquifer interference approvals,
 - (ii) to specify alternate access rules for lagoons, lakes, in-river pools and other lentic bodies, and/or
 - (ii) to extend the exemption to the cease to take conditions for stock watering purposes specified in clause 40 (6) (b) beyond year five of this Plan and/or modify the volume of water permitted to be taken for stock watering purposes after year five of this Plan,
- (c) establish or assign new TDELs in these water sources or management zones following the imposition of an adaptive environmental water condition on an access licence that requires the water to be left in the water source or management zone for environmental purposes,
- (d) establish or assign new TDELs in these water sources or management zones to protect a proportion of flow within each flow class for the environment,
- (e) amend or remove TDELs if TDELs have been established or assigned under paragraphs (c) and/or (d),

- (f) include rules for the establishment, assignment and removal of IDELs,
- (g) amend clause 40 to remove the existing access rules where TDELs and/or IDELs have been established under paragraphs (d) and/or (f) to protect a proportion of flow within each flow class for the environment, or
- (h) amend clause 40 to reinstate access rules that applied at the commencement of this Plan, where TDELs and IDELs have been removed under paragraphs (e) and (f).

69 Part 9

Part 9 may be amended to do any of the following:

- (a) amend clause 44 to specify water sources or management zones where water supply work approvals must not be granted or amended to authorise an in-river dam on third order or higher streams,
- (b) amend the definition of a replacement groundwater work in clause 46,
- (c) add, remove or modify a restricted distance specified in:
 - (i) clause 47 after year 5 of this Plan, or
 - (ii) clause 49 based on the outcomes of further studies of groundwater dependent ecosystems that have been assessed as adequate by the Minister, or
- (d) amend clause 51 to impose further restrictions on the rate and timing of extraction of water from the respective water source to mitigate impacts.

70 Part 10

Part 10 may be amended to modify the interstate trading rules for these fractured rock groundwater sources.

71 Part 11

Part 11 may be amended to do any of the following:

- (a) amend the rules in relation to record keeping including amendments in relation
-

to requirements for Logbooks, or

- (b) amend clause 63 to specify different standards for decommissioning water supply works or construction requirements for water supply works.

72 Schedules

- (1) Schedule 1 may be amended to add, modify and/or remove a definition.
- (2) Schedule 2 may be amended to do any of the following:
 - (a) add a new access licence to clause 1 of Schedule 2, provided that a written request has been made to the Minister and the Minister is satisfied that extraction under the access licence is for a purpose listed in clause 40 (6) (a) and that purpose was specified on or referred to in the conditions of the former *Water Act 1912* entitlement that was replaced by the access licence or referred to in its conditions,
 - (b) add a local water utility access licence or an access licence of the subcategory “Town water supply” to clause 2 of Schedule 2, provided the Minister is satisfied that the water supply system used to take, store and deliver water has not undergone major augmentation since the commencement of this Plan,
 - (c) remove an access licence or former *Water Act 1912* entitlement from Schedule 2 if:
 - (i) an access licence dealing results in water being taken under the licence being taken from a different location,
 - (ii) an alternative water supply is obtained, or
 - (iii) the licence is surrendered or cancelled or its purpose ceases to exist, or
 - (d) remove a local water utility or an access licence of the subcategory “Town water supply” or former *Water Act 1912* entitlement from clause 2 of Schedule 2 if the Minister is satisfied that the water supply system used to extract, store and deliver water has undergone major augmentation since the commencement of this Plan.

- (3) Schedule 3 may be amended to add or remove a contamination source.
- (4) Schedule 4 may be amended to:
 - (a) add or remove a sensitive environmental area,
 - (b) add a new high priority groundwater dependent ecosystem or remove a high priority groundwater dependent ecosystem, or
 - (c) add a new high priority karst environment groundwater dependent ecosystem or remove a high priority karst environment groundwater dependent ecosystem.

73 Other

- (1) This Plan may be amended to provide rules for the following:
 - (a) managed aquifer recharge,

Note. Managed aquifer recharge schemes involve taking water such as recycled water or urban stormwater, treating it and then storing it in underground aquifers under controlled conditions. This water can then be extracted at a later time.
 - (b) the management of floodplain harvesting within these water sources,
 - (c) the shepherding of water,
 - (d) any new category of access licence established for the purpose of stormwater harvesting, provided that the amendments do not affect the long-term average annual extraction limit specified in this Plan, or
 - (e) the interception of water before it reaches a stream or aquifer by plantations or other means.
 - (2) This Plan may be amended to give effect to an intergovernmental agreement between the States for the management of water contained within these water sources.
 - (3) Consequential amendments may be made to this Plan as a result of an amendment to the Act or regulations.
 - (4) This Plan may be amended following the granting of a native title claim pursuant to the provisions of the *Native Title Act 1993* (Cth) to give effect to an entitlement
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granted under that claim.

- (5) This Plan may be amended after Year 5 to provide rules for the protection of water dependent Aboriginal cultural assets, including:
- (a) the identification of water dependent Aboriginal cultural assets in a schedule,
 - (b) amending the access rules to protect water dependent Aboriginal cultural assets,
 - (c) restricting the granting and amendment of water supply works to protect water dependent Aboriginal cultural assets, and/or
 - (d) amending the dealing rules to protect water dependent Aboriginal cultural assets.

Schedule 1 Dictionary

Aboriginal person has the same meaning as under section 4 of the *Aboriginal Land Rights Act 1983*.

alluvial sediments means unconsolidated fluvio-lacustrine sediments.

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

escarpment refers to steep to precipitous landform pattern forming a linearly extensive, straight or sinuous inclined surface, which separates terrains at different altitudes that above the escarpment commonly being a plateau. Relief within the landform pattern may be high (hilly) or low (planar). The upper margin is often marked by an included cliff or scarp.

fractured rock means sedimentary, igneous and metamorphic rocks with fractures, joints, bedding planes and cavities in the rock mass that are capable of transmitting water.

full containment volume means the volume of water that is impounded in the pool, lagoon or lake when the level of water in the pool, lagoon or lake is at the high water mark.

grazeable area means, for an individual landholding, the area of pasture in hectares for a pasture type that is accessible for stock grazing and able to grow appropriate vegetation for stock grazing, but does not include impervious surfaces (such as rocks or rocky terrain, man-made structures, mines or quarries) or other such surfaces that do not support grazing vegetation, such as water bodies and forested floors with no undergrowth.

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

high environmental value areas mean national parks, nature reserves, historic sites, Aboriginal areas, State conservation areas and karst conservation areas.

individual daily extraction limit (IDEL) is the volume of water that may be extracted by an individual access licence from an unregulated river on a daily basis from a particular flow class.

in-river dam means a dam located in a river.

in-river dam pool means the area of water immediately upstream of an in-river dam where the river has pooled as a result of an in-river dam.

karst means an area of land, including subterranean land, that has developed in soluble rock through the processes of solution, abrasion or collapse, together with its associated bedrock, soil, water, gases and biodiversity.

Logbook, in relation to an access licence or water supply work approval, means a written record, kept in hard copy or electronic form, which accurately records all information required to be kept in relation to the access licence or water supply work approval under the rules of this Plan.

management zone is an area within a water source in which rules particular to that management zone will apply, for example daily extraction limits and restrictions on dealings.

porous rock means consolidated sedimentary rock containing voids, pores or other openings

(such as joints, cleats and/or fractures) which are interconnected, in the rock mass and are capable of transmitting water.

Registered Map for these water sources has the same meaning as in clause 4 (2) of this Plan.

replacement groundwater work has the same meaning as in clause 46 (2) of this Plan.

runoff harvesting dam is a dam on a hillside or minor stream which collects and stores rainfall runoff. Minor streams are as defined in an order made under section 53 of the Act. For the purposes of this Plan, references to runoff harvesting dams as water supply works include any associated pumps or other works which take water from the dam. For the purpose of clarity, this definition includes dams that are also used to store water diverted into the dam from a river or other source of water.

shepherding means the delivery of a calculated volume of water that was created by the non-activation/reduced extraction at a nominated licence location to a more downstream location, after consideration of losses, where it will be made available for extraction or use for the environment.

slotted intervals means that part of the water bore where slots in the casing occur which are designed to allow water to enter the bore.

stream order means the stream order defined by the Strahler stream ordering method.

Note. The Strahler stream ordering method is as described in the order made under section 5 of the *Water Act 1912* published in the NSW Government Gazette No 37 on 24 March 2006 page 1500 or as may be amended or updated from time to time by further order.

total daily extraction limit (TDEL) is the volume of water that may be extracted under access licences from an unregulated river on a daily basis from a particular flow class.

visible flow means the continuous downstream movement of water that is perceptible to the eye.

Water Act 1912 entitlement has the same meaning as an entitlement has in clause 2 of Schedule 10 to the Act.

water year means a year commencing 1 July.

Schedule 2 Access licences used to take surface water exempt from cease to pump rules

1 General

This clause applies to each access licence which replaces a *Water Act 1912* entitlement listed in the table below.

<i>Water Act 1912</i> entitlements that will be replaced by access licences on commencement of this Plan.

2 Local water utility access licences and access licences of subcategory “Town water supply”

This clause applies to each access licence which replaces a *Water Act 1912* entitlement listed in the table below.

<i>Water Act 1912</i> entitlements that will be replaced by local water utility access licences or access licences of the subcategory “Town water supply” on commencement of this Plan.

Schedule 3 Contamination sources in these water sources

Contamination sources in these water sources are the following:

- (a) on site sewage disposal systems or septic tanks,
- (b) any sites which have been declared to be significantly contaminated land under the *Contaminated Land Management Act 1997*,
- (c) any sites with a historical use that is listed in Table 1 of *Managing Land Contamination. Planning Guidelines. SEPP 55–Remediation of Land*, and
- (d) any sites listed in an agency database relating to contamination sources.

Schedule 4 High priority groundwater dependent ecosystems

Note. High priority groundwater dependent ecosystems (hereafter **GDEs**) are currently under investigation and some of these may be identified during the term of this Plan. The full list of potential GDEs will be identified on the NSW Office of Water GDE Register and as a precautionary approach, will be considered by staff in the assessment of any application for a water supply work approval within the area of this Plan. If verified as high priority GDEs, the Schedule will be amended to include further GDEs.

1 High priority groundwater dependent ecosystems

High priority groundwater dependent ecosystems in the Adelaide Fold Belt North Western Groundwater Source are as specified in Table A.

Note. The approximate location of high priority GDEs listed in Column 1 of Table A is provided as Easting and Northing coordinates in Columns 3 and 4 of Table A. The approximate location of high priority GDEs listed in Column 1 of Table A are shown on the map in Appendix 3.

Table A—High priority groundwater dependent ecosystems

Column 1 High priority groundwater system	Column 2 Type	Column 3 Easting	Column 4 Northing	Column 5 Water Source
Tarrawingee Springs	Spring	542196.51	6518931.09	Adelaide Fold Belt North Western Groundwater Source
Corona Springs	Spring	546712.07	6525469.68	Adelaide Fold Belt North Western Groundwater Source

2 High priority karst environment groundwater dependent ecosystems

High priority karst environment groundwater dependent ecosystems in the Adelaide Fold Belt North Western Groundwater Source and the Kanmantoo Fold Belt North Western Groundwater Source are as specified in Table B.

Note. The approximate location of high priority karst environment GDEs listed in Column 1 of Table B are shown on the map in Appendix 3.

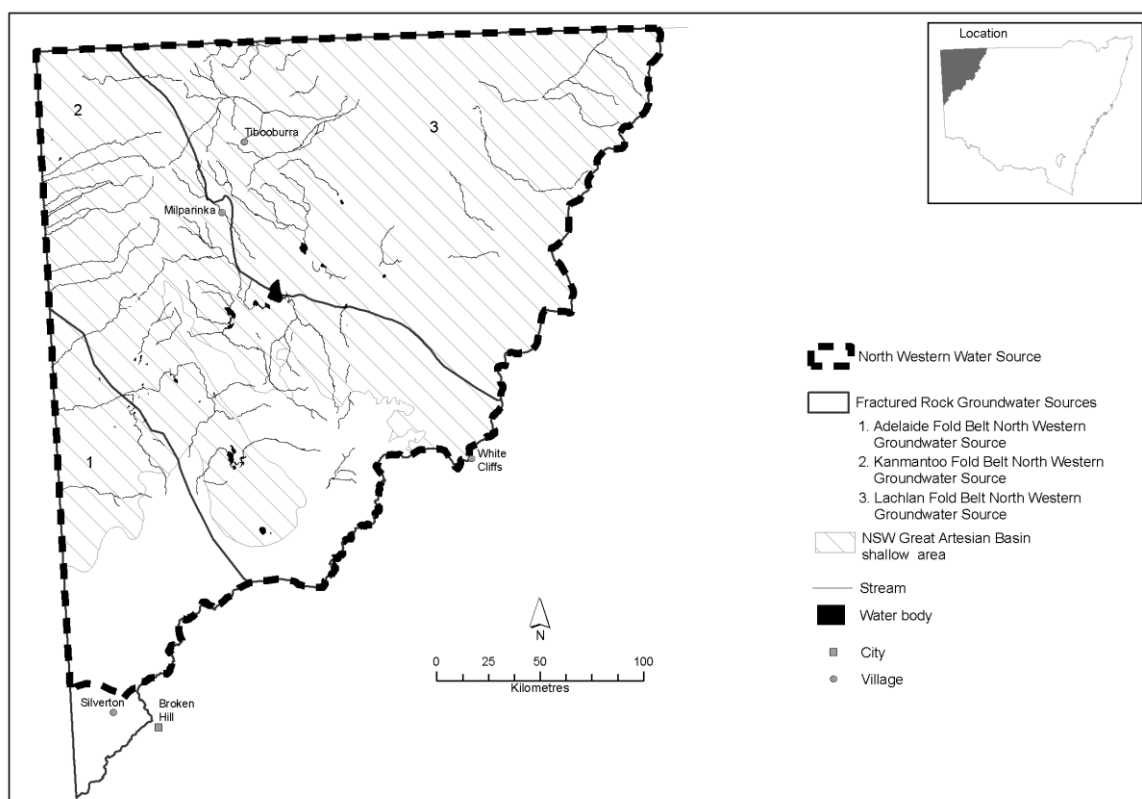
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Table B—High priority karst environment groundwater dependent ecosystems

Column 1 High priority karst environment groundwater dependent ecosystem	Column 2 GDE Type	Column 3 Water Source
Mutawintji	Karst	Kanmantoo Fold Belt North Western Groundwater Source
Torrowangee	Karst	Adelaide Fold Belt North Western Groundwater Source

Appendix 1 Overview of the Registered Map

Overview of the Registered Map for the North Western Unregulated and Fractured Rock Water Sources



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Appendix 2 Inspection of Registered Map

Copies of the Registered Map may be inspected at the following offices:

NSW Office of Water
10 Valentine Ave
PARRAMATTA NSW 2150

NSW Office of Water
209 Cobra St
DUBBO NSW 2830

Appendix 3 Groundwater Dependent Ecosystems in the North Western Unregulated and Fractured Rock Water Sources.

Note. The map in this Appendix shows the approximate location of the high priority GDEs specified in Column 1 of Table A in Schedule 4 and the high priority karst environment GDEs listed in Column 1 of Table B in Schedule 4.

High priority groundwater dependent ecosystems in these fractured rock groundwater sources in the Water Sharing Plan for the North Western Unregulated and Fractured Rock Water Sources

