

Water Sharing Plan for the Wybong Creek Water Source 2003

[2003-175]



New South Wales

Status Information

Currency of version

Historical version for 20 June 2006 to 5 July 2012 (accessed 11 January 2025 at 4:22)

Legislation on this site is usually updated within 3 working days after a change to the legislation.

Provisions in force

The provisions displayed in this version of the legislation have all commenced.

Notes—

- **Does not include amendments by**
[Statute Law \(Miscellaneous Provisions\) Act 2012 No 42](#) (not commenced — to commence on 6.7.2012)
- **Note**
In incorporating the amendments made by the *Water Management (Minister's Plans) Order No 2 of 2004*, published in Gazette No 110 of 1.7.2004, p 5072, changes have been made to the numbering of some of the provisions to maintain appropriate numerical or alphabetical order.

Authorisation

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File last modified 21 June 2012

Water Sharing Plan for the Wybong Creek Water Source 2003



New South Wales

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Water Sharing Plan for the Wybong Creek Water Source 2003



New South Wales

Part 1 Introduction

1 Name of Plan

This Plan is the *Water Sharing Plan for the Wybong Creek Water Source 2003* (hereafter **this Plan**).

2 Nature and status of this Plan

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

3 Date of commencement and term of this Plan

This Plan takes effect on 1 July 2004 and ceases 10 years after that date.

4 Area to which this Plan applies

- (1) The area in respect of which this Plan is made is that area of land within the Hunter Water Management Area known as the Wybong Creek Water Source (hereafter **this water source**) as shown in Schedule 2.

Note—

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

Note—

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

- (2) This water source is divided into the following management zones shown on the map in Schedule 2:
 - (a) Wybong Creek and tributaries upstream of the Cuan Creek intersection and

adjacent alluvial sediments (hereafter **Zone 1**),

(b) Wybong Creek and tributaries downstream of the Cuan Creek intersection and adjacent alluvial sediments (hereafter **Zone 2**), and

(c) Cuan Creek and tributaries and adjacent alluvial sediments (hereafter **Zone 3**).

Note—

Access licence dealing rules are defined for each management zone.

5 Waters to which this Plan applies

(1) The waters of this water source includes all water occurring on or below the land surface shown on the map in Schedule 2 including, but not limited to:

(a) all rivers in this water source including, but not limited to, those nominated in Schedule 3,

(b) all lakes and wetlands in this water source, and

(c) the groundwater within all alluvial sediments below the surface of the land shown on the map in Schedule 2, excluding any groundwater contained in fractured rock aquifers and basement rocks in the area to which this Plan applies.

6 Interpretation

(1) Terms that are defined in the Act have the same meaning in this Plan and the effect of these terms may be explained in Notes.

(2) Additional terms to those identified in subclause (1) are defined in Schedule 1.

(3) Notes in the text of this Plan do not form part of this Plan.

(4) Schedules to this Plan form part of this Plan.

(5) Appendices to this Plan do not form part of this Plan.

7 Effect on licences, authorities and permits under the [Water Act 1912](#)

(1) This Plan applies from commencement to those matters that are administered under the Act at that time.

(2) This Plan applies to other matters from the date the relevant provisions of the Act are commenced.

Note—

To the extent possible, the rules embodied in this Plan will apply to matters administered under the [Water Act 1912](#) in the interim.

8 State Water Management Outcomes Plan

- (1) In accordance with section 16 (1) (a) of the Act, this Plan is consistent with the State Water Management Outcomes Plan published in the NSW Government Gazette on 20 December 2002 (hereafter **the SWMOP**).
- (2) Schedule 4 identifies the SWMOP targets applicable to this Plan and how this Plan contributes to those targets.

Part 2 Vision, objectives, strategies and performance indicators

9 Vision, objectives, strategies and performance indicators

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

10 Vision

- (1) The vision for this Plan is a healthy, diverse and productive water source providing sustainable management of this water source for the community, environment, agriculture and industry.
- (2) This Plan also recognises the following respect statement for Aboriginal values in this water source:
 - (a) life-giving water is of extreme significance to Aboriginal culture for its domestic, traditional and spiritual values, and
 - (b) whilst water supplied for the environment will provide protection for native flora and fauna, water for fishing, food gathering and recreational activities, it is important that the community respects the spiritual significance of water to the Aboriginal people.

11 Objectives

The objectives of this Plan are to:

- (a) protect natural water levels in pools during periods of no flows,
- (b) protect natural low flows,
- (c) protect or restore a proportion of moderate flows (freshes) and high flows,
- (d) maintain or restore the natural inundation patterns and distribution of floodwaters supporting natural wetland and floodplain ecosystems,
- (e) maintain or imitate natural flow variability,
- (f) maintain groundwater within natural levels and variability critical to surface flows and ecosystems,

- (g) minimise the impacts of in-river structures,
- (h) ensure river flow management provides for contingencies,
- (i) maintain or improve the ecological condition of this water source and its riparian areas over the longer term,
- (j) recognise and protect the contribution from this water source to downstream water sources' environmental and basic right requirements,
- (k) maintain water supply priority for basic landholder rights,
- (l) provide an agreed level of water sharing for irrigation and other industry,
- (m) recognise and protect traditional values of water to Aboriginal people, and
- (n) contribute to the achievement of water quality to support the environmental values of this water source.

Note—

This objective refers to maintaining water quality. Although there are no specific strategies directly related to this objective in this Plan, the environmental water provisions in this Plan make a positive contribution to maintaining water quality.

12 Strategies

The strategies of this Plan are to:

- (a) establish cease (and commence) to pump levels and flow classes,
- (b) limit the amount of water that can be extracted on a daily basis from different flow classes,
- (c) limit the long-term average extraction of water,
- (d) clearly define access rules and conditions for extracting water from this water source,
- (e) establish rules for determining the water available from time to time under access licences,
- (f) establish water allocation accounting rules, and
- (g) specify access licence dealing rules that maximise flexibility for water users without adversely impacting on this water source.

13 Performance indicators

The following indicators are to be used to determine the performance of this Plan against its objectives:

- (a) change in low flows,
- (b) change in moderate to high flows,
- (c) change in ecological condition of this water source and dependent ecosystems,
- (d) extent to which basic landholder rights requirements have been met,
- (e) change in economic benefits derived from water extraction and use,
- (f) extent to which native title rights requirements have been met,
- (g) extent of recognition of spiritual, social and customary values of water to Aboriginal people, and
- (h) (Repealed)

Note—

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

Part 3 Basis for water sharing

14 Basis for water sharing

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

15 Climatic variability

- (1) This Plan recognises climatic variability and therefore river flow variability in this water source, and also that the level of natural recharge to the groundwater component of this water source will vary.
- (2) To give effect to subclause (1), this Plan has provisions that manage:
 - (a) the sharing of groundwater in this water source within the limits of groundwater availability on a long-term average basis,
 - (b) sharing of the flows that occur in this water source on a daily basis, and
 - (c) water extraction to enable the protection of groundwater dependent ecosystems, aquifer integrity and water quality of this water source.

16 Extraction management unit

- (1) The availability of water for extraction from this water source on a long-term average basis will be determined at the level of an extraction management unit.
- (2) The extraction management unit of which this water source is part is known as the

Goulburn Extraction Management Unit (hereafter **this Unit**), and is shown on the map in Schedule 5.

- (3) This Unit excludes all groundwater sources unless the groundwater source is established by a Plan made under sections 41 or 50 of the Act to be within this Unit.
- (4) This Unit excludes any river declared by the Minister, and published in the NSW Government Gazette, to be a regulated river.

17 Flow classes

This Plan establishes the following flow classes as the basis for sharing access to water on a daily basis:

- (a) very low flow class at or less than 1 megalitre per day (hereafter **ML/day**) on a rising river, and at or less than 0.5 ML/day on a falling river,

Note—

0.5 ML/day corresponds to the estimated 90th percentile of all days with flow, and is referred to as the cease to pump on a falling river, and 1 ML/day corresponds to the estimated 80th percentile of all days with flow, and is referred to as the commence to pump on a rising river. Special provisions may result in a review of the cease to pump during the life of this Plan.

- (b) B class flows greater than 1 ML/day and at or less than 7 ML/day on a rising river, and greater than 0.5 ML/day and at or less than 7 ML/day on a falling river,
- (c) C class flows greater than 7 ML/day and at or less than 16 ML/day,
- (d) D class flows greater than 16 ML/day and at or less than 100 ML/day, and
- (e) E class flows greater than 100 ML/day.

Note—

This Plan provides for a review of the very low flow class in accordance with clauses 76 and 77.

Note—

The flow classes have been determined based on flow information that inherently includes seasonal effects as well as evaporation and seepage losses.

18 Flow reference point

For the purpose of this Plan, all flows referred to relate to the estimated flows at the flow reference point at the downstream end of this water source, as shown on the map in Schedule 2.

19 Determination of flow class

Announcement of flow classes will be made from time to time by the Minister based on the flow at a flow gauging station, correlated to the flow reference point established in

clause 18.

Note—

At the commencement of this Plan, the Wybong flow gauging station will be used as the tool to assess the end of water source flow. Additional flow gauging stations may be established as part of the implementation of this Plan. All gauging stations will be calibrated to the flow reference point.

20 Recharge of the groundwater component of this water source

For the purposes of section 5 (3) of the Act, the overall basis for water sharing in this Plan includes the average annual recharge to the alluvial aquifers in this water source of 3,820 megalitres per year (hereafter **ML/yr**).

Part 4 Environmental water provisions

21 Environmental water provisions

This Part is made in accordance with sections 5 (3) and 8 (1), 8 (2) and 20 (1) (a) of the Act.

22 Planned environmental water

(1) Environmental health water is identified and established as follows:

- (a) in very low flows, the surface water flow occurring in this water source, minus the very low flow access permitted under clause 66A of this plan, plus the groundwater storage component of this water source, plus 100% of the groundwater recharge, minus 1.8 ML/day,

Note—

1.8 ML/day is the amount of water estimated at the commencement of the Plan for basic landholder rights. At the time of making this Plan there were no access licences with very low flow access.

- (b) in B class flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 50% of the groundwater recharge, minus 8.8 ML/day,

Note—

8.8 ML/day is the amount of water estimated at the commencement of the Plan for B class total daily extraction limits and basic landholder rights.

- (c) in C class flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 30% of the groundwater recharge, minus 15.3 ML/day,

Note—

15.3 ML/day is the amount of water estimated at the commencement of the Plan for C class total daily extraction limits and basic landholder rights.

- (d) in D class flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 30% of the groundwater recharge, minus 21.8 ML/day,

Note—

21.8 ML/day is the amount of water estimated at the commencement of the Plan for D class total daily extraction limits and basic landholder rights.

- (e) in E class flows, the surface water flow occurring in this water source, plus the groundwater storage component of this water source, plus 30% of the groundwater recharge, minus 38.8 ML/day, and

Note—

38.8 ML/day is the amount of water estimated at the commencement of the Plan for E class total daily extraction limits and basic landholder rights.

- (f) on a rising river, the daily flow for 24 hours after an upper flow level specified in clause 17 (a) to (c) is exceeded, minus the total daily extraction limit (hereafter **TDEL**) for the flow class that occurred prior to the flow level being exceeded as specified in clause 46 (1), minus the provision for basic landholder rights specified in clauses 27 and 28.

Note—

This provision ensures the first flush of a rising river is allowed to pass before increased water extraction can commence.

- (2) The planned environmental water in subclause (1) may be amended, as specified in clause 76.
- (3) Environmental health water is maintained as follows:
- (a) in very low flows:
- (i) the holders of access licences, except for those listed in Schedule 6, are not permitted to access any water,
 - (ii) access licences listed in Schedule 6 have restricted access to water as specified in clause 66A, and
 - (iii) persons exercising domestic and stock and native title rights may take a combined total of up to 1.8 ML/day,

Note—

The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

- (b) in B class, C class, D class and E class flows:
 - (i) the holders of access licences have restricted access to water as specified in clause 46,
 - (ii) persons exercising domestic and stock and native title rights may take water, and
 - (iii) if the water taken under domestic and stock and native title rights is assessed to be exceeding 1.8 ML/day in this flow class the access to water for access licences will be reduced in accordance with clause 51 to maintain the planned environmental water in this flow class,
- (c) in all flow classes, limits are imposed on the availability of water in accordance with clauses 36 and 38, that protect a proportion of both natural river flows and the average annual recharge of the aquifer for fundamental ecological needs from increases in long-term water extraction,
- (d) on a rising river, for 24 hours after an upper flow level specified in clause 17 (a) to (c) is exceeded, the holders of access licences may only extract the TDEL for the flow class that occurred prior to the flow level being exceeded as specified in clause 46 (1),
- (e) (Repealed)
- (f) the Minister may:
 - (i) within twelve months of gazettal of this Plan, identify pools in the rivers in the water source that require special protection and establish initial pool control levels at key sites,
 - (ii) consult with appropriate Government Departments and water users in the water source in establishing the control levels in subclause (i),
 - (iii) determine that, notwithstanding all other rights and conditions, extraction of water from a designated pool is not permitted below a specified level, and
 - (iv) pursuant to section 45 (1) (b) of the Act, review the initial pool control levels in accordance with clause 76.

Note—

These rules protect the water for the environment by limiting both the water extracted over the long term, and the rate of extraction of water in different flow ranges, and by limiting extraction from the alluvial aquifer to a percentage of the annual average recharge, thereby achieving the objectives of this Plan.

Note—

This Plan recognises that the planned environmental water provisions provide non-extractive benefits including, traditional Aboriginal spiritual, social, customary and cultural benefits, and contribute to improved water quality.

23 Extraction by water supply work

- (1) Notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work is permitted only if there is visible flow in the river in the vicinity of the work.
- (2) In addition to subclause (1), all approved water supply works within 40 metres of the rivers specified in Schedule 3, shall comply with pool control levels and key sites established under clause 22 (3) (f).

Note—

Provisions in this clause will help achieve the objective specified in clause 11 (a).

24 Planned environmental water

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

25 Adaptive environmental water

- (1) At any time an access licence holder may, by a process determined by the Minister, commit all or part of their licence as adaptive environmental water.
- (2) The Minister may grant an access licence in a water source to which this Plan applies if the licence is subject to an adaptive environmental water condition and arises through water savings in the system made in that water source as referred to in section 8C (1) of the Act.
- (2A) The Minister may change the category or subcategory of an access licence in a water source to which this Plan applies if the licence is subject to an adaptive environmental water condition that arises through water savings as referred to in section 8D of the Act.
- (3) At the commencement of this Plan there are no access licences committed to an environmental purpose in accordance with section 8 (1) (c) of the Act.

Part 5 Basic landholder rights

26 Basic landholder rights

This Part is made in accordance with sections 5 (3) and 20 (1) (b) of the Act.

Note—

The Minister may issue an Order under section 328 of the Act to restrict the exercise of domestic and stock and native title rights from this water source to protect the environment, for reasons of public health, or to preserve basic landholder rights.

27 Domestic and stock rights

- (1) At the commencement of this Plan, the water requirements of holders of domestic and stock rights are estimated to be a total of 1.8 ML/day.
- (2) This Plan recognises that the exercise of domestic and stock rights may increase during the term of this Plan.

Note—

Increase in use of domestic and stock rights may occur as a result of an increase in the number of landholdings fronting rivers and lakes in this water source or as a result of an increase of the exercise of basic landholder rights by existing landholders and/or by the subdivision of properties where water can be extracted from the alluvial aquifer.

28 Native title rights

- (1) At the commencement of this Plan there are no holders of native title rights and therefore the water requirements for native title rights are a total of 0 ML/day.
- (2) This Plan recognises that the exercise of native title rights may increase during the term of this Plan.

Note—

Increase in use of native title rights may occur as a result of granting of native title rights under the Commonwealth's [Native Title Act 1993](#).

29 Harvestable rights

The requirement for water under harvestable rights is the amount of water owners of land are entitled to capture pursuant to the harvestable rights Order published in the NSW Government Gazette on 23 March 2001 under section 54 of the Act.

Part 6 Bulk access regime

30 Bulk access regime

- (1) This Part is made in accordance with section 20 (1) (e) of the Act.
- (2) This Plan establishes a bulk access regime for the extraction of water under access licences in this water source having regard to:
 - (a) the environmental water provisions established under Part 4 of this Plan,
 - (b) the requirements for basic landholder rights identified under Part 5 of this Plan, and
 - (c) the requirements for water for extraction under access licences identified under Part 7 of this Plan.
- (3) The bulk access regime established in subclause (2):

- (a) recognises the effect of climatic variability on the availability of water as provided for under Part 3 of this Plan,
- (b) establishes rules according to which access licences are granted as provided for in Part 8 of this Plan,
- (c) recognises and is consistent with limits to the availability of water as provided for in Part 9, Division 1 of this Plan,
- (d) establishes rules according to which available water determinations are to be made as provided for in Part 9 Division 2 of this Plan,
- (e) establishes rules according to which access licences are managed as provided for in Part 10 of this Plan, and
- (f) establishes rules with respect to the priorities according to which access licences are to be adjusted as a consequence of any reduction in the availability of water as provided for in Parts 9 and 10 of this Plan.

Part 7 Requirements for water under access licences

31 Requirements for water under access licences

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

Note—

The amount of water specified in this Part represents the estimated total volumes specified on access licences to extract water from this water source. It is not a commitment to supply that water.

32 Estimate of water requirements

- (1) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, the requirements identified for water for extraction under access licences within this water source will total approximately:
 - (a) 7,942 ML/yr for unregulated river and domestic and stock access licences, and
 - (b) 267 ML/yr for aquifer access licences.
- (2) It is estimated that at the time of commencement of Part 2 of Chapter 3 of the Act, there will be several runoff harvesting access licences in this water source, that will have their access licence share component expressed as the water that can be extracted from time to time from the approved works.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than access licences of the following kinds:
 - (a) specific purpose access licences for which applications are provided for under the regulations in accordance with section 61 (1) (a) of the Act, or

- (b) Unregulated river (Aboriginal cultural) access licences up to 10 ML per application.

Part 8 Rules for granting access licences

33 Rules for granting access licences

- (1) This Part is made in accordance with sections 20 (2) (b) and 63 of the Act, having regard to the limits to water availability in this water source and the need to protect the ecological health of the river and groundwater dependent ecosystems and groundwater quality.
- (2) Access licences may be granted in this water source subject to any embargo on the making of applications for access licences made under Chapter 3 Part 2 Division 7 of the Act.
- (3) The Minister should declare an embargo on the making of applications for access licences in this water source, other than access licences of the following kinds:
 - (a) specific purpose access licences for which applications are provided for under the regulations in accordance with section 61 (1) (a) of the Act, or
 - (b) unregulated river (Aboriginal cultural) access licences or aquifer (Aboriginal cultural) licences up to 10 ML/yr per application.
- (4) In applying for a new access licence, the applicant must establish the purpose and circumstances relating to that access licence, and that the share components and extraction components sought will be the minimum required to meet that purpose and circumstance.
- (5) Subclause (4) does not apply to an application for a new access licence arising from:
 - (a) section 61 (1) (c), of the Act, where the right has been acquired by auction, tender or other open market process, or
 - (b) an access licence dealing.
- (6) Any individual daily extraction limit (hereafter **IDEL**) granted in accordance with this clause cannot exceed the IDEL initially assigned to an equivalent share component for that category of access licence, as varied by clause 51.
- (7) Runoff harvesting access licences may have the share component expressed either as a volume in ML/yr or in terms of the amount of water that can be extracted from time to time from specified works.

Part 9 Limits to the availability of water

Division 1 Long-term average extraction limit

34 Limits to the availability of water

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

35 Extraction management unit

Management of the long-term extraction of water from this water source will be undertaken in the context of the extraction management Unit referred to in clause 16 (2).

36 Long-term average extraction limit

(1) The long-term average extraction limit in this Unit will be the total of:

- (a) The total requirements for water for extraction under access licences within this water source, as specified in Part 7 of this Plan,
- (b) The total requirements for water for extraction under access licences within other water sources in this Unit,
- (c) an estimate of the annual extraction of water under domestic and stock rights, and native title rights in this water source at the commencement of this Plan, and
- (d) an estimate of the annual extraction of water under domestic and stock rights, and native title rights in this other water sources in this Unit.

37 Variation of the long-term average extraction limit

The long-term average extraction limit of this Unit may be varied by the Minister if access licence dealings result in the granting, surrender, non-renewal or cancellation of access licences in this Unit.

Division 2 Available water determinations

38 Available water determinations

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

(2) In making an available water determination under section 59 of the Act, the Minister should consider the following rules:

- (a) water extraction in this Unit will be monitored in each water accounting year to determine if there is any growth in volumes extracted above the long-term average extraction limit specified in clause 36, based on comparison of the limit against the average extraction within this Unit over that year and the preceding 2 years,

Note—

A water accounting year is defined in clause 43 (3).

- (b) if water that, pursuant to an access licence, is committed as adaptive environmental water, then for the purpose of subclause (a), the extraction will be assumed to be 100% of the available water determination,
- (c) from 1 July 2004, the available water determination for domestic and stock access licences should be of such volume of water as is equivalent to the access licence share component, with priority given to making this water available above the making of water available to all other categories of access licence, and such determinations should be made annually,
- (d) for unregulated river and aquifer access licences, an initial available water determination, of such volume of water as is equivalent to two times the access licence share component, should be made on 1 July 2003, and such determination should apply for one water accounting year,
- (e) from 1 July 2004, available water determinations for unregulated river and aquifer access licences, including all subcategories, should be such volume of water as is equivalent to the access licence share component, except as provided in subclauses (f) and (g), and such determinations should be made annually,
- (f) if the 3 year average of extraction in this Unit exceeds the long-term average extraction limit established in clause 36 by 5% or greater, then the available water determination for the following water accounting year for unregulated river and aquifer access licences in this water source should be reduced by an amount that is assessed necessary by the Minister to return subsequent total water extraction to the long-term average extraction limit,
- (g) when the 3 year average of extraction in this Unit is less than 95% of the long-term average extraction limit established in clause 36, the available water determination for unregulated river and aquifer access licences in this water source shall be increased to such an extent as to allow extraction to increase to that extraction limit,
- (h) notwithstanding subclause (g), and excepting the initial available water determination made in accordance with subclause (d), the available water determination should not exceed 100% of the total access licence share components,
- (i) a new available water determination for unregulated river and aquifer access licences determined under subclause (f) or (g) should be repeated for each of the subsequent two water accounting years unchanged in quantity, and
- (j) available water determinations for runoff harvesting access licences should be

made annually and should be the access licence share component.

Part 10 Rules for managing access licences

Division 1 General

39 Rules for managing access licences

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

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

Division 2 Water allocation account management

40 Water allocation account management

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

41 Water allocation accounts

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

Note—

Water allocations may be assigned to or from these accounts by a water allocation assignment made under Chapter 3 Part 2 Division 4 of the Act, where these are allowed under rules specified in Part 11 of this Plan.

Note—

Water allocations may also be recredited to these accounts in accordance with section 76 of the Act, subject to the operation of a return flows scheme established under section 75 of the Act.

42 Accrual of water allocations

Water allocations will be accrued into water allocation accounts in accordance with the Minister's available water determinations as specified in clause 38.

43 Annual accounting for water extraction

- (1) Water taken from this water source will be accounted for at least annually.
- (2) Water extracted by a water supply work nominated by an access licence is taken to be extracted and will be periodically debited against the access licence water allocation account.

- (3) A water accounting year shall be the 12 month period commencing 1 July.
- (4) The maximum water allocation that can be carried over from one water accounting year to the next is 100% of the access licence share component.
- (5) In any one water accounting year water taken from this water source under an access licence may not exceed the volume in the water allocation account, subject to clause 44 (1).
- (6) A water allocation account shall remain at or above zero at all times.

44 Three year accounting for water extraction

- (1) Water taken from this water source in any 3 consecutive water accounting years under an access licence may not exceed a volume consisting of:
 - (a) the water allocations accrued under the licence in those years,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71T of the Act in those years,
 - (c) plus any water allocations reccredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71T of the Act in those years.
- (2) Notwithstanding subclause (1), water taken under an access licence from this water source in the first 3 water accounting years of this Plan may not exceed a volume consisting of:
 - (a) 3 times the share component of the access licence,
 - (b) plus any water allocations assigned from another licence by a water allocation assignment under section 71T of the Act in those years,
 - (c) plus any water allocations reccredited in accordance with section 76 of the Act in those years, and
 - (d) minus any water allocations assigned to another licence, by a water allocation assignment under section 71T of the Act in those years.

Division 3 Sharing flows on a daily basis

45 Sharing flows on a daily basis

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

46 Total daily extraction limits

(1) This Plan establishes a total daily extraction limit (hereafter **TDEL**) from this water source for each flow class as follows:

(a) 7 ML/day for B class,

Note—

7 ML/day represents 28% of the top of B class flows for the critical month (December) and 50% of the recharge (expressed on a daily basis).

(b) 13.5 ML/day for C class;

Note—

13.5 ML/day represents 40% of the top of C class flows for the critical month (December) and 70% of the recharge (expressed on a daily basis).

(c) 20 ML/day for D class,

Note—

20 ML/day represents 13% of the 15th percentile flows for the critical month (December) and 70% of the recharge (expressed on a daily basis).

(d) 37 ML/day for E class, and

Note—

37 ML/day represents 30% of the 15th percentile in the critical month (December) and 70% of the recharge (expressed on a daily basis).

(e) (Repealed)

Note—

The TDEL defines the maximum volume of water that can be extracted from this water source on any day when the flow in the Creek is at a particular flow level. The TDEL is also subject to review in accordance with clauses 76 and 77.

(2) The TDEL for each flow class specified in subclause (1) applies to all rivers and aquifers within this water source apart from those rivers identified as minor streams in a harvestable right Order made under section 54 of the Act.

Note—

The harvestable rights Order applying to this area at the commencement of this Plan is that gazetted on 23 March 2001 under section 54 of the Act. It identifies minor streams as non-permanent 1st and 2nd order streams as shown on topographic maps.

47 Initial assignment of the TDEL to categories of access licence

The TDEL for each flow class will initially be assigned to categories of access licences according to the following:

(a) Domestic and stock access licences:

- (i) 0.2 ML/day of B class,
- (ii) 0.2 ML/day of C class,
- (iii) 0.2 ML/day of D class, and
- (iv) 0.2 ML/day of E class.

(b) Unregulated river and aquifer access licences:

- (i) 6.8 ML/day of B class,
- (ii) 13.3 ML/day of C class,
- (iii) 19.8 ML/day of D class, and
- (iv) 36.8 ML/day of E class.

48 Unassigned TDEL

- (1) At the commencement of this Plan, there is no unassigned TDEL.
- (2) If an access licence is surrendered, cancelled or not renewed the TDEL for unregulated river and aquifer access licences in clauses 47 shall be diminished accordingly.

Note—

While the outcome of the review at clauses 76 and 77 may result in an increase in the TDEL, this will not result in additional unassigned TDEL.

49 Daily extraction limits for individual access licence holders

- (1) Each access licence requiring an individual daily extraction limit (hereafter **IDEL**), as specified in Part 12 of this Plan, will be assigned the same proportion of the TDEL specified in clause 47 as its share component bears to all the share components of licences of that category.
- (2) Assignment of IDELs to access licences will occur after the review of TDELs as specified in clauses 76 and 77.
- (3) Notwithstanding subclause (1), in relation to those access licences that are currently excluded from a flow class or part of a flow class by existing conditions on the access licence or the water supply work nominated by the access licence, the IDEL resulting from subclause (1) will be adjusted to reflect as far as possible such an exclusion.

50 Granting of unassigned TDEL

There will be no unassigned TDEL for the duration of this Plan.

51 Adjustment to TDELS and IDELS

- (1) Pursuant to section 45 (1) (b) of the Act, if total extraction of water under domestic and stock or native title rights exceeds the level specified in Part 5 of this Plan:
 - (a) the TDEL for unregulated river and aquifer access licences in clause 47 (b) shall be diminished to allow these additional basic landholder rights to be met, and
 - (b) the IDELS of each unregulated river and aquifer access licence will then be reduced to comply with this diminished TDEL.
- (2) If the review of the very low flows specified in clauses 76 and 77 results in an amended TDEL for any flow class, then the assignment of the TDEL in a flow class to unregulated river and aquifer access licences as specified in clause 47 (b) shall be adjusted so the TDEL for the flow class is not exceeded.

Note—

The amendment of the TDEL may result in a change of the volumes assigned to unregulated river and aquifer access licences.

52 Administrative arrangements for managing access to daily flows

- (1) Notwithstanding the forgoing provisions of this Division, this Plan allows group management of access licences with respect to the IDELS.
- (2) The Minister may determine that, from the commencement of this Plan and until otherwise determined:
 - (a) all access licences with IDELS shall be made part of a group maintained by the Minister, and
 - (b) access licences with IDELS will be assessed as a whole against their combined IDELS.
- (3) At any time when subclause (2) does not apply:
 - (a) access licence holders may make a request to form a group for their access licences,
 - (b) access licence holders may have their licence removed from a group, in which case they shall be permitted to extract under that licence a maximum of the licensed IDEL, and
 - (c) where an access licence is removed or added to a group, the group's combined IDEL shall be adjusted by the amount of the IDEL on the subject access licence.
- (4) Groups will be managed according to the following rules:
 - (a) daily extraction by a group cannot exceed the combined IDELS of all access

licences in the group,

- (b) where it been assessed that a holder of an access licence within a group is repeatedly causing the combined IDEL to be exceeded then the Minister may remove that access licence from the group,
- (c) where daily extraction by a group exceeds the combined IDELs of all access licences in the group, then the Minister may dissolve the group and require each access licence holder to comply with the licensed IDELs,
- (d) should a holder of an access licence which is part of a group commit the IDELs of that licence to the environment consistent with section 8 (1) (c) of the Act, then those IDELs shall be removed from the group,
- (e) an access licence may not be in more than one group, and
- (f) the Minister may refuse to allow an access licence to be included in a group, and may refuse a request to form a group.

53 Infrastructure failure

- (1) In the event of infrastructure failure, the Minister can elect to:
 - (a) continue to announce the current flow class,
 - (b) announce another flow class based on climatic conditions and any other flow gauging information, or
 - (c) restrict access to water to the lowest flow class.

Note—

Infrastructure is defined in the dictionary.

Note—

If satisfied that it is necessary to do so in the public interest, the Minister may direct the holders of an access licence to cease using a water supply work in accordance with section 323 of the Act.

Division 4 Management of local impacts

54 Management of local impacts

- (1) This Division is made in accordance with sections 21 (a) of the Act.
- (2) This Division only applies to aquifer access licences in this water source.

55 Water level management

- (1) The Minister may declare that, in order to protect groundwater levels within the aquifer in this water source, local access rules are to apply in a defined area known as

a local impact area.

- (2) If water levels in any part of the aquifer in this water source have declined to such an extent that adverse impact is occurring, or is likely to occur, extraction from all water supply works (bores) within a local impact area declared under subclause (1) from which access is authorised by an aquifer access licence will be restricted to such an extent and for such time as is required to reinstate water levels to such a degree as to mitigate or avoid that impact.

Note—

This provision recognises that in some locations, at certain periods of high groundwater demand, critical water level declines may occur, and that additional extraction limitations may be required.

56 Water quality management

- (1) The beneficial uses of the aquifer in this water source are raw water for drinking, and ecosystem protection, based on beneficial use classes identified in the Australian and New Zealand Environment and Conservation Council *Water Quality Guidelines 2000*, and the National Health and Medical Research Council *Raw Water for Drinking Purposes Guidelines 1996*.
- (2) Water quality decline will be deemed unacceptable if extraction is likely to cause water quality to decline to a lower beneficial use class.

Note—

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

- (3) The Minister may declare that, in order to protect water quality within the aquifer of this water source, local access rules are to apply in a defined area known as a local impact area.
- (4) If unacceptable water quality declines are resulting from extraction, extraction from all water supply works (bores) within a local impact area declared under subclause (3) from which access is authorised by an aquifer access licence will be restricted to such an extent and for such time as required to halt that decline, or restore the beneficial use of the aquifer in this water source.

57 Extraction restrictions

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

Part 11 Access licence dealing rules

58 Access licence dealing rules

- (1) This Part is made in accordance with section 20 (1) (e) of the Act and with the Minister's access licence dealing principles gazetted on 27 December 2002 under section 71Z of the Act.
- (2) Applications for access licence dealings may be granted subject to the Minister's access licence dealing principles gazetted from time to time under section 71Z of the Act and the rules in this Part.

Note—

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

Note—

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

59 Rules relating to constraints within this water source

- (1) This clause applies to any relevant dealings under sections 71Q, 71S and 71W of the Act, and section 71T of the Act with respect to water allocation assignments within this water source.
- (2) Dealings are prohibited under this clause if:
 - (a) any of the access licences or water allocations involved are not within this water source, unless the dealing is permitted under clause 64,

Note—

Clause 61 relates to any dealings that involve an access licence moving from one water source to another.

- (b) prior to initial assignment of IDELs, the dealing results in the total share component of all access licences that have nominated waters supply works in the receiving management zone exceeding 10% of the total share component existing at the time of the commencement of Part 2 of Chapter 3 of the Act in this water source, unless the dealing is:
 - (a) from management zone 1 to management zone 2, or
 - (b) from management zone 3 to management zone 2.
- (c) after initial assignment of IDELs, the dealing would result in the access licence

extraction component that had nominated a work in one management zone, nominating a work in another management zone, and the change of location is in an up-river direction, unless the sum of the IDELs held in the up-river zone remains not more than 10% greater than the sum of the IDELs in the receiving zone when IDELs are initially assigned or unless the dealing is into management zone 1 where there is no constraint, or

- (d) the dealing would result in the total extraction under aquifers access licences through nominated works in an area, plus basic landholder rights extraction in that area, causing adverse local impact in accordance with Part 10 Division 4 of this Plan.

60 Rules for access licence dealings which alter the times, rates or circumstances specified in access licence extraction components

Notwithstanding clause 59, applications under section 71S of the Act to vary the times, rates or circumstances specified in an access licence with respect to the taking of water under the licence are prohibited.

61 Rules for change of water source

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

Note—

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

- (2) Dealing under section 71R of the Act are prohibited in this water source, unless provided for in this clause.
- (3) An access licence with a share component specifying this water source may be cancelled and a new licence issued only if the new access licence issued is within this Unit, and the access licence dealing rules in the other water source permit such a dealing.
- (4) An access licence with a share component specifying another water source may be cancelled and a new licence issued in this water source only if:
 - (a) the access licence cancelled is within this Unit,
 - (b) the access licence dealing rules in the other water source permit such a dealing, and
 - (c) IDELs in this water source have been assigned to access licences.

Note—

Allowing access licence share component dealings before the assignment of IDELs would distort the initial

distribution of the TDEls as IDEls.

- (5) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71Z of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.
- (6) The extraction component of the cancelled access licence is not to be carried over to the new access licence.

62 Rules for conversion of access licence category

- (1) This clause relates to dealings under section 71O of the Act.
- (2) Conversion of an access licence of one category to an access licence of another category may be permitted only if:
 - (a) the conversion is from an unregulated river or aquifer access licence to a runoff harvesting access licence,
 - (b) the conversion is from unregulated river access licence to an aquifer access licence,
 - (c) (Repealed)
 - (d) the conversion is from unregulated river access licence to stock and domestic access licence.
- (3) The volume of share component on an access licence issued under this clause is to be the volume of the cancelled share component multiplied by a conversion factor established by the Minister, and published in an Order made under section 71Z of the Act, that protects environmental water, basic landholder rights, and the reliability of supply to all other access licences subject to this Plan.

63 Rules for interstate access licence transfer

- (1) This clause relates to dealings under section 71U of the Act.
- (2) Dealings that result in the interstate transfer of an access licence into or out of this water source are prohibited.

64 Rules for water allocation assignments between water sources

- (1) This clause relates to dealings under section 71T of the Act, in relation to water allocation assignments between water sources.
- (2) Dealing under section 71T of the Act that result in water allocation assignments to or from access licences in this water source are prohibited unless provided for in this

clause.

- (3) Dealings that assign water allocations between access licences inside this water source and access licences outside this water source, but inside this Unit, are permitted only if the access licence dealing rules in the other water source permit such a dealing.
- (4) Dealings that assign water allocations between access licences inside this water source are permitted, subject to clause 59.

Note—

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

65 Rules for interstate assignment of water allocations

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

Part 12 Mandatory conditions

66 Mandatory conditions on access licences

- (1) This Part is made in accordance with sections 17 (c) and 20 (2) (c) of the Act.
- (2) All access licences shall have mandatory conditions to give effect to the following:
 - (a) the specification of share component of the access licence,
 - (b) the specification of extraction component of the access licence, including IDELS arising from the operation of Part 10 Division 2 of this Plan, where applicable, and the variation thereof,
 - (c) the requirement that extraction under the access licence will be subject to the available water determinations,
 - (d) the requirement that extraction under the access licence will be subject to the water allocation account management rules established in Part 10 Division 1 of this Plan,
 - (e) the requirement that the taking of water in accordance with the access licence will only be permitted if the resulting debit from the access licence water allocation account will not exceed the volume of water allocation remaining in the account,
 - (f) the requirement that water may only be taken under the access licence by the water supply work nominated by the access licence,

- (g) the requirement that water may only be taken in accordance with a flow class determined by the Minister, at a rate not exceeding that specified for the flow class on the access licence extraction component, unless otherwise authorised by an approved group, or if the access licence is a runoff harvesting access licence,
- (h) the requirement that an unregulated river access licence or a runoff harvesting access licence does not authorise its holder to take water from the aquifers of this water source, and
- (i) any other conditions required to implement the provisions of this Plan.

66A Very low flow access conditions

- (1) Notwithstanding any cease to pump conditions established on the licence, during periods of very low flows, holders of access licences listed on Schedule 6 may continue to access water to comply with the requirements of the Food Production (Safety) Act or the Prevention of Cruelty to Animals Act for the following purposes:
 - (a) fruit and vegetable washing,
 - (b) cleaning of dairy plant and equipment for the purpose of hygiene,
 - (c) poultry watering and misting, and
 - (d) cleaning of enclosures used for intensive animal production for the purposes of hygiene.
- (2) The maximum daily volume that can be extracted under subclause (1) will be the minimum required to satisfy the purposes in that subclause, will be individually assessed and specified on each access licence within 12 months of the commencement of this Plan, will not exceed 20 kilolitres per day, and will not be increased.
- (3) Upon written request by the holder of an access licence, the Minister may add a licence to Schedule 6, but only if the licence meets the purpose requirements established in subclause (1), and the purpose existed prior to 1 July 2004.
- (4) An access licence will be removed from the Schedule if:
 - (a) any access licence dealing results in the water being extracted from a different location,
 - (b) an alternative water supply is obtained, that satisfies the requirements of subclause (1), or
 - (c) the licence is surrendered, cancelled, or not renewed.
- (5) Notwithstanding subclauses (1) to (4), extraction of water by an approved water supply work is only permitted if there is visible flow in the river in the vicinity of the

work.

- (6) An assessment of the continuing requirements for access under this clause will be undertaken before the end of this Plan, and the Schedule amended or deleted at the end of this Plan, if such a review determines that this concessional access is no longer required.
- (7) The assessment made under subclause (6) will be undertaken for the Plan as a whole, and for each individual licence on the Schedule.

67 Aquifer access licences

All aquifer access licences shall have an additional mandatory conditions to give effect to the following:

- (a) the requirement that all extraction under aquifer access licences will be subject to the local impact management conditions established in Part 10 Division 4 of this Plan, and
- (b) the requirement that an aquifer access licence only authorises its holder to take water from the aquifers of this water source.

68 Domestic and stock access licences

All domestic and stock access licences shall have an additional mandatory condition to give effect to the following:

- (a) water may only be taken for the purposes of domestic consumption or stock watering as defined in section 52 of the Act.

69 Runoff harvesting access licences

All runoff harvesting access licences shall have an additional mandatory condition imposed on them specifying that water may be taken without restriction in rate, but only from the specified work.

69A Unregulated river (Aboriginal cultural) access licences

All unregulated river (Aboriginal cultural) access licences shall have mandatory conditions to give effect to the following:

- (a) Water shall only be taken by Aboriginal persons or communities for personal, domestic and communal purposes including the purposes of drinking, food preparation, washing, manufacturing traditional artefacts, watering domestic gardens, cultural teaching, hunting, fishing, and gathering, and for recreational, cultural and ceremonial purposes.

70 Mandatory conditions on water supply works approvals

Approvals for water supply works for this water source shall have mandatory conditions to

give effect to the following:

- (a) extraction measurement devices:
 - (i) shall be installed and maintained on all works used for extraction of water under an access licence, and
 - (ii) shall be of a type and shall be maintained in a manner which is acceptable to the Minister,
- (b) water extraction and property water management infrastructure details shall be provided to the Minister on request,
- (c) it is the responsibility of the work approval holder to ascertain from the Minister the flow class at any time before commencing to take water under an access licence with an IDEL,
- (d) notwithstanding all other rights and conditions, extraction of water from a river by an approved water supply work shall be permitted only when extraction is consistent with the provisions in clause 23, and, where necessary, the Minister will determine the location and method by which this shall be assessed to suit local circumstances,
- (e) (Repealed)
- (f) approvals for works used for taking water under an access licence include a condition that extraction under an access licence through the approved work is only authorised with respect to the access licences specified in the condition, and such access licences must be held or leased by the holder of the works approval,
- (g) approvals for dams constructed or used for the storing of water include a requirements for the effective sealing of a dam base against leakage and shall include the requirements to supply:
 - (i) details of the work as set out in the appropriate form, and
 - (ii) a plan showing accurately the location of the work,
- (h) if the water supply works are abandoned at any time, the approval holder must notify the Minister and ensure the works are appropriately removed and, in the case of water bores ensure the aquifer is abandoned to the specifications of the Minister,
- (i) a water bore is only to be constructed by a driller licensed under section 349 of the Act,
- (j) a water bore must comply with drilling standards as specified by the Minister,
- (k) construction of a water bore must prevent contamination between aquifers through proper bore construction,

- (l) a water bore approval holder must ensure decommissioning procedures comply with applicable standards as specified by the Minister,
- (m) new or replacement water bore to access water for basic rights will be required, as a condition of approval, to be constructed to sufficient depth to maintain access to the water source for the life of the work,
- (n) the water bore approval holder is, within 2 months of completion, or after the issue of the approval if the water bore is existing, to furnish to the Minister with:
 - (i) details of the work on the prescribed form,
 - (ii) a plan showing accurately the location of the work in relation to portion and property boundaries, and
 - (iii) details of any water analysis and/or pumping tests required by the Minister,
- (o) if during the construction of the water bore, saline or contaminated water is encountered above the producing aquifer, such water is to be sealed off by:
 - (i) inserting the appropriate length(s) of casing to a depth sufficient to exclude the saline or contaminated water from the work, and
 - (ii) placing an impermeable seal between the casing(s) and the walls of the bore hole from the bottom of the casing to ground level, as specified by the Minister,
- (p) if a water bore is abandoned, the water bore approval holder is to:
 - (i) notify the Minister that the work has been abandoned, and
 - (ii) seal off the aquifer by backfilling the work to ground level after withdrawing the casing (lining), as specified by the Minister,
- (q) a water bore must comply with the relevant local impact management rules in Part 10 Division 4 of this Plan,
- (r) notwithstanding the available water determination, it is the responsibility of the water bore approval holder to ascertain from the Minister whether or not there are in place any local impact restrictions before commencing to take water from this water source, and
- (s) a water bore approval holder must supply to the Minister on request, and to the required standards, a report pertaining to the quality of the water obtained from the water bore.

Part 13 Granting and amending water supply works approvals

71 Granting and amending water supply works approvals

This Part is made in accordance with section 21 (b) of the Act.

72 Runoff harvesting dams

- (1) New or expanded runoff harvesting dams shall, in addition to other considerations, be subject to the dam capacity not exceeding that which is consistent with the access licence specifying the runoff harvesting dam as the nominated work.
- (2) When water allocations that may be taken from a runoff harvesting dam are reduced either by the Minister, or on application of the approval holder, or by an assignment in accordance with Part 11 of this Plan, the Minister may impose an additional condition requiring the dam to be modified so as to reduce its capacity, or requiring the water taken and evaporated from the dam to be reduced, consistent with the reduction in water allocations available.

Note—

Extraction of water from a runoff harvesting dam requires a runoff harvesting access licence, unless the runoff harvesting dam is within the maximum harvestable right dam capacity for the property on which it is located, in which case no licences or approvals are required. Runoff harvesting is a category of access licence to be established by regulation under section 57 (k) of the Act.

73 In-river dams

No new in-river dams shall be approved within this water source.

Note—

Taking of water from an in-river dam requires an access licence unless it is taken in accordance with section 52 of the Act (domestic and stock rights). In either case, however, the dam requires a water management works approval unless exempted by regulation under the Act.

Part 14 Monitoring and reporting

74 Monitoring and reporting of performance indicators

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

Note—

Review and Audit of this Plan

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

When undertaking this review the Natural Resources Commission is required to call for public submissions. The

Commission will take into consideration any submission received as well as any other relevant State-wide or regional government policies or agreements that apply to the catchment management area.

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

Note—

Implementation Program

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

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

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

Part 15 Amendment of this Plan

75 Amendment of this Plan

This Part is made in accordance with section 45 (1) (b) of the Act.

76 Amendment of flow levels, pool protection provisions and TDELS

- (1) The Minister may, under section 45 (1) (b) of the Act and by notice published in the NSW Government Gazette:
 - (a) vary the very low flow levels, and the bottom of B class flows established in clause 17, following field verification,
 - (b) vary the initial pool control levels and key sites established in clause 22 (3) (f),
 - (c) vary the TDEL for any flow class as specified in clause 46, following a study of water usage and a study of the connectivity of surface water and groundwater, and/or
 - (d) vary the planned environmental water specified in clause 22 as a result of any variation to a TDEL arising from subclause (1) (c).
- (2) Any variation made under subclause (1) (a) should not result in the very low flow class being greater than 1 ML/day or less than 0.5 ML/day on a falling river.
- (3) Any variation made under subclause (1) (c) should be limited to:
 - (a) for B class, no more than 60% of the surface flow assessed in subclause (8) at the 50th percentile flow of all days at the flow reference point, but not less than 4 ML/day,

- (b) for C class, no more than 60% of the surface flow assessed in subclause (8) at the 30th percentile flow (of all days) at the flow reference point, but not less than 11.5 ML/day,
 - (c) for D class a maximum of 6.5 ML/day above the TDEL for C class, but not less than 20 ML/day, and
 - (d) for E class a maximum of 50 ML/day, but not less than 37 ML/day.
- (4) The Minister should undertake the field verification in subclause (1) (a) as soon as practical, but before the review of this Plan under section 43 (2) of the Act.
 - (5) The Minister should review the pool control levels and key sites in subclause (1) (b) in conjunction with the field verification in subclause (4).
 - (6) The Minister should cause the studies established in subclause (1) (c) to be undertaken after at least 3 years of measurement of use, but before the review of this Plan under section 43 (2) of the Act.
 - (7) The field verification established in subclauses (1) (a) and the pool control level review in subclause (1) (b) should assess:
 - (a) whether the flow level meets the objectives at clause 11 (a) and (b) of this Plan, and
 - (b) whether the pool control levels and key sites meet the objectives specified in clauses 11 (a) and (i), and specifically consider the following:
 - (i) the suitability of the location of the key sites used in assessing pool health upstream of the site,
 - (ii) the drawdown of the water levels within the pools upstream of the key sites during periods of extraction, and
 - (iii) the significance of pools that are impacted by drawdown.
 - (8) The studies established in subclause (1) (c) shall:
 - (a) assess whether existing and proposed TDELs meet the objectives specified in clause 11 (e) and (f), and
 - (b) specifically determine the assessed surface flow at the flow reference point by developing the relationship between the flow reference point flow and daily extracted volumes, including consideration of the following matters:
 - (i) summation of surface flow and extraction on any day,
 - (ii) development of a theoretical flow duration curve for the period of the study based on the summation of surface flow and extraction,

- (iii) calibration of the theoretical flow duration curve using historical rainfall data and by using a control site in another water source,
 - (iv) reassessment of the river and groundwater connectivity and specifically, review of the groundwater sustainable yield,
 - (v) the relationship of river flow at various sites within this water source for different flow classes, determined by information from any or all river flow gauging stations, and
 - (vi) the water level behaviour of groundwater monitoring bores.
- (9) In undertaking the field verification and studies of water usage and connectivity of surface water and groundwater in this clause, the Minister should:
- (a) consult with the NSW Environment Protection Authority, NSW Fisheries, NSW Agriculture and the NSW National Parks and Wildlife Service, and
 - (b) prepare a report documenting:
 - (i) the methodology adopted,
 - (ii) the hypotheses tested,
 - (iii) the field results and conclusions in terms of the degree to which the objectives in subclauses (7) and (8) are met,
 - (iv) the flow levels, pool control levels and key sites and TDELs recommended to meet the objectives, and
 - (v) the socio-economic impacts of recommended changes to the flow levels, pool control levels and key sites, and changes to TDELs.

77 Review of field verification and TDELs

- (1) The Minister should seek advice from a review body on the report specified in clause 77 (9) (b), before varying this Plan in accordance with clause 77 (1), if the report recommends a variation in the flow levels in clause 17, the establishment or variation of pool control levels and key sites, and a variation of TDELs in clause 46.
- (2) This review body may be:
- (a) a water management committee with water sharing responsibilities for this water source, or
 - (b) the relevant Catchment Management Authority, or
 - (c) an expert advisory panel or advisory committee established for this purpose by the Minister on the recommendation of a water management committee or

Catchment Management Authority referenced at subclause (2) (a) or (b).

- (3) The review body should provide advice to the Minister on the report specified in clause 76 (9) (b), and advise on any changes to the recommendations contained in the report in relation to any variations of the flow levels, any establishment or variation of pool control levels and key sites and any variations of TDELS.
- (4) The review body should respond to the Minister as soon as practical after receiving the report, or within 3 months of that date at the latest.

78 Other amendment of this Plan

This Plan can also be amended in accordance with clause 51 of this Plan in respect to adjustments to TDELS and IDELS.

79 Amendment relating to planned environmental water

- (1) The Minister may amend this Plan to provide for the recovery of planned environmental water as follows:
 - (a) the recovery is only to apply where the Minister has cancelled an access licence held by the Minister in accordance with section 8A of the Act,
 - (b) the amount of additional water to be provided as planned environmental water is to be equivalent to the annual average extraction of water under the cancelled licence over the long-term,
 - (c) the average annual long-term availability of water for the remaining access licences that relate to the water source concerned is to be reduced by the average annual long-term extraction of water under the cancelled licence.
- (2) The Minister may amend this Plan to specify the purposes for which planned environmental water committed under section 8A of the Act is to be used.

80 Amendment of Plan relating to floodplain harvesting

The Minister may amend this Plan so as to provide for the floodplain harvesting of water by amending the waters or water sources to which this Plan applies and by consequential amendments so long as the amendments:

- (a) if the Plan has already taken into consideration floodplain harvesting extractions, do not affect the outcomes of the long-term extraction limit specified in the Plan, or
- (b) if the Plan has not already taken into consideration floodplain harvesting extractions, do not allow more water being taken pursuant to access licences for floodplain harvesting than permitted under Schedule F to the Agreement within the meaning of the *Murray-Darling Basin Act 1992*.

Dictionary

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

account water is the balance in a licence water allocation account at a particular time.

Note—

A licence water allocation account records water allocations accrued under the licence as well as water allocations taken, assigned or re-credited. The operation of the account is also governed by rules for the carrying over of credits from one accounting period to the next and rules for the maximum credit that may be allowed to accumulate in the account as established in a water sharing plan. Water allocations are the shares of available water accrued under an access licence from time to time as a result of available water determinations.

abandoned refers to a water bore that is no longer being used.

conversion factor refers to the adjustment factor that is to be applied to an access licence share component when it is cancelled in one water source, and reissued in a different water source and visa versa, or when the access licence is converted from one category to another. It is designed to provide for the fact that the value of a unit of share component in terms of the average water allocations that result from it may vary from one water source to another, or from one category to another.

endangered ecological communities means ecological communities listed in Schedule 1 of the [Threatened Species Conservation Act 1995](#) or Schedule 4 of the [Fisheries Management Act 1994](#).

extraction limit is a limit on the amount of water that may be extracted from an extraction management unit.

extraction management unit is a group of water sources for the purpose of managing long-term annual average extraction.

farm dam is a privately owned dam typically of earthen construction designed to collect and/or store water for use on one or a few properties. It does not include publicly owned dams or weirs. See also **in-river dam** and **runoff harvesting dam**.

flow classes are categorised by the size and duration of flow levels in unregulated rivers, for example:

- (a) very low flows may be a class on their own,
- (b) low flows may be categorised as 'A' class,
- (c) moderate flows may be categorised as 'B' class,
- (d) high flows may be categorised as 'C' class,
- (e) very high flows may be categorised as 'D' class, and
- (f) extremely high flows may be categorised as 'E' class.

flow gauging station is a device that is used to measure the height of a river, from which the flow in the river can be calculated.

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

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

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

infrastructure includes, but is not limited to, a:

- (a) flow gauging device or any other appliance that is used to measure the height of a river relative to a known datum point, from which the flow in the river can be calculated,
- (b) flow announcement system which is the mechanism by which the Minister communicates daily flow classes to the holders of an access licence within this water source, or
- (c) monitoring bore.

in-river dam is a dam on a 3rd, 4th or higher order river. 3rd, 4th or higher order rivers are as defined in the order made under section 5 of the [Water Act 1912](#) in relation to the definition of a “river” gazetted 23 March 2001. See also **farm dam** and **runoff harvesting dam**.

management zone is an area within the water source to which total daily extraction limits are defined. Management zones are designated only where the water source to which the plan applies is divided into areas and total daily extraction limits are defined for each area.

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

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

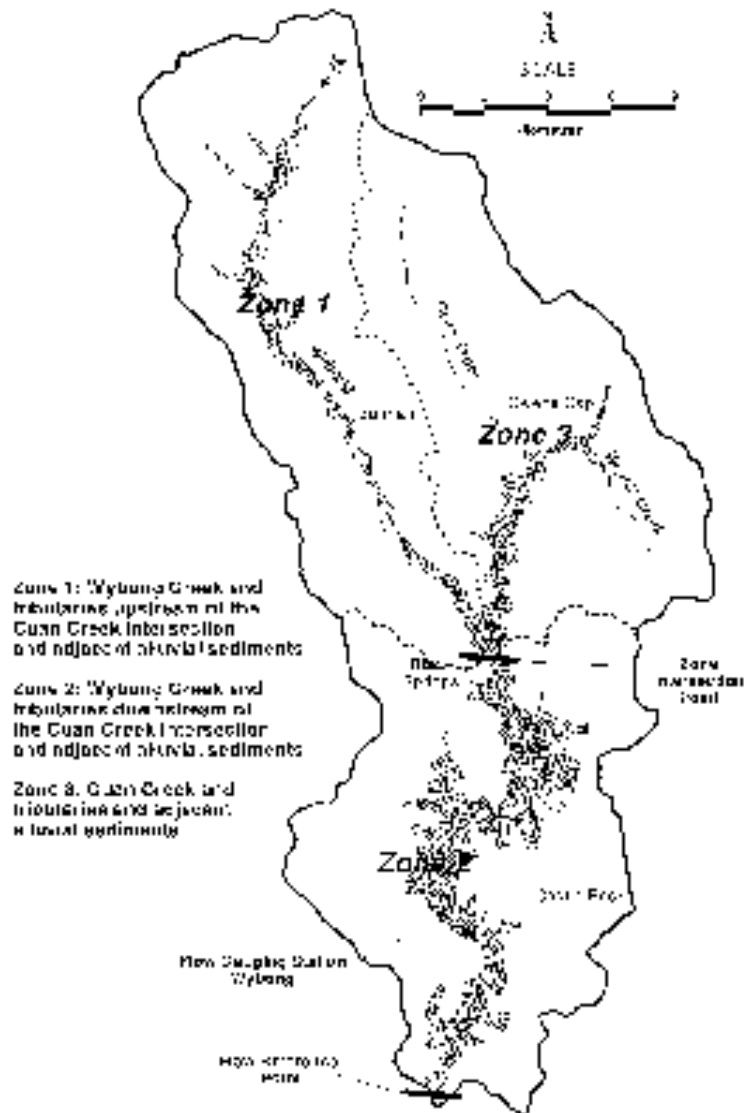
runoff harvesting dam is a farm dam on a hillside or 1st or 2nd order stream which collects and stores rainfall runoff. 1st and 2nd order streams are as defined in the order made under section 5 of the [Water Act 1912](#) in relation to the definition of a river gazetted 23 March 2001. See also **farm dam** and **in-river dam**.

Note—

This order refers to watercourses shown as blue lines on topographic maps. The lines which are uppermost in a catchment are 1st order streams, when two 1st order streams are joined they make a 2nd order stream, etc. For more information see the Farm Dams Assessment Guide available from the Department of Land and Water Conservation.

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

Schedule 2 Wybong Creek Water Source



Schedule 3 Rivers in the Wybong Creek Water Source

Rivers in this water source include, but are not limited to:

- Wybong Creek
- Cuan Creek
- Wrights Creek

Schedule 4 Contribution to relevant targets in the December 2002 State Water Management Outcomes Plan

Levels of assessed contribution:

FULL—contributes to the target in full

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

PARTIAL—goes some way to contributing to the target

LOW—only small degree of contribution to the target

Relevant target	Level of contribution	Comments
<p>Target 1c Long term average annual extraction limits which are ecologically sustainable, and which minimise downstream impacts, established in all coastal water sources</p>	PARTIAL	<ul style="list-style-type: none"> This Plan clearly sets out the basis for the extraction limit for the Goulburn Extraction Management Unit. Until the cumulative impact of this limit can be assessed for the Goulburn Extraction Management Unit it is not possible to properly assess ecological sustainability and downstream impacts. However application of TDEs should ensure adequate downstream flows.
<p>Target 1e The long term average annual extractions for groundwater limited (or being phased down) to an ecologically sustainable level (the Sustainable Yield) as determined by detailed assessment of each groundwater source and consultation with the relevant management committee. In the absence of such an assessment, the following to apply: 100 percent of average annual recharge for a groundwater source where there is no significant ecosystem dependency; 70 percent of average annual recharge where there is significant ecosystem dependency</p>	HIGH	<ul style="list-style-type: none"> This Plan establishes a maximum extraction of groundwater of 70% of average annual recharge.
<p>Target 1f Rules for adjustments to future available water determinations in the event that the extraction limits are exceeded, clearly prescribed in consultation with the relevant management committee, and acted upon</p>	FULL	<ul style="list-style-type: none"> Rules set out in Part 9 of this Plan.

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

PARTIAL

- This Plan has daily extraction limits to protect/restore environmental flows.
- This Plan has improved low to very low flow protection by establishing a cease to pump and daily extraction limits for C and D class flows.
- It is not clear if the level of environmental protection provided by this Plan will be adequate to protect/improve environmental conditions as this depends on the appropriateness of the hypothesis on groundwater connectivity.
- This Plan allows for a review at year 5 of this Plan of the flow levels, pool protection measures and daily extraction limits following various hydrological and water use studies.
- There is a Healthy River Commission final report pending.
- The interaction of the highly connected groundwater with the river and the impact of groundwater extraction below or adjacent to the creek is to be reviewed at year 5 of this Plan.

Target 4a Wherever the frequency of “end of system” daily flows would be less than 60 percent of the pre-development level without environmental water rules or extraction limits, the flows increased to 60 percent of pre-development levels or increased by at least 10 percent of the pre-development frequency

PARTIAL

- In C and D classes this Plan rules appears to be an improvement on the current management system.
- This Plan also protects the first 24 hours of a flow event by delaying access to the higher class of flows by water users.
- This Plan provides for a review of the cease to pump level, the thresholds of all the flow classes and the daily extraction limits at year 5.

Target 4b Frequency of “end of system” daily very low flows (as defined by local field investigation) protected or restored to predevelopment levels to maintain or restore their critical ecological functions, drought refuges and habitat connectivity. In the absence of such local assessments, protection extended up to at least the predevelopment 95th percentile

PARTIAL

- This Plan has a cease to pump level of 0.5 ML/day and a commence to pump level of 1 ML/day. The 1 ML/day is equivalent to the 95th percentile of all days with flow.
- The interaction of the highly connected groundwater with the river is to be reviewed at year 5 of this Plan.
- This Plan provides for field verification of flows and review of the cease to pump levels during the term of this Plan.

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

PARTIAL

- This Plan establishes both share and extraction components for distribution to individual licence holders.
- This Plan enables the trading of share components and IDELS between access licences.

Target 6b For surface water sources, a pathway for reducing the share components to 200 percent of the long term average annual extraction limit to be established not later than the end of the term of the SWMOP

FULL

- Total share components for the Goulburn Extraction Management Unit should not exceed 200% of the extraction limits for this Unit.
- Groundwater share components do not exceed 125% of the sustainable yield.

Target 7 Mechanisms in place to enable Aboriginal communities to gain an increased share of the benefits of the water economy

PARTIAL

- The Government has established alternative mechanisms to address this targets.
- This Plan does provide reasonable market opportunities.

Target 8 Daily extraction components specified and tradeable, subject to metering, reporting and compliance, for at least 50 percent of unregulated river access licences and for 80 percent of stressed unregulated rivers

FULL

- This Plan establishes daily extraction limits across the whole water source.

Target 10 Degree of connectivity between aquifers and rivers assessed, and zones of high connectivity mapped to enable baseflows to the river to be maintained or improved

PARTIAL

- This Plan recognises the connectivity between surface and groundwater.
- This Plan is to review the connectivity at year 5 and changes to be made to the flow sharing rules set up by this Plan if required.

<p>Target 11 Groundwater dependent ecosystems identified and mapped for all priority aquifers, and the ecological water requirements assessed to enable local groundwater extraction rates and/or Sustainable Yields to be reviewed</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • Groundwater dependency of the river environment has been recognised. • Review mechanisms established by this Plan.
<p>Target 12 Measures in place in all water sources subject to a gazetted water sharing plan to protect domestic and stock rights from the impact of other water access and use</p>	<p>LOW</p>	<ul style="list-style-type: none"> • The cease to pump level of 0.5 ML/day is less than the assessed requirements for basic landholder rights of 1.8 ML/day. • Groundwater pumping below cease to pump levels may compromise basic landholder rights access in dry periods.
<p>Target 13 The knowledge sharing, training and resources necessary to ensure that Aboriginal people have the capacity to be effectively involved in water management identified and addressed</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • Two Aboriginal community representatives have been represented on the water management committee. • A workshop was held with members of the LALC to input ideas into development of this Plan. • This Plan does not address specific Aboriginal cultural or traditional requirements but has identified dependent ecosystems of particular importance.
<p>Target 14 Water sources, ecosystems and sites of cultural or traditional importance to Aboriginal people identified, plans of management prepared, and measures put in place to protect and improve them</p>	<p>PARTIAL</p>	<ul style="list-style-type: none"> • An Aboriginal respect statement was developed by local traditional landowners was adopted in the development of this Plan. • This Plan does provide a level of environmental protection which should assist in protecting Aboriginal values.
<p>Target 16a All share components of access licences tradeable</p>	<p>FULL</p>	<ul style="list-style-type: none"> • Part 11 of this Plan sets out the rules for access licence dealings.
<p>Target 16c Conversion factors and protocols established to facilitate trading and dealings between water sources, whilst also protecting existing access and environmental water</p>	<p>FULL</p>	<ul style="list-style-type: none"> • This Plan provides for the Minister to establish conversion factors.
<p>Target 16f Zones established where necessary for environmental protection and limits/constraints on water dealings in them made explicit</p>	<p>FULL</p>	<ul style="list-style-type: none"> • This Plan establishes management zones for the trading of IDELS. • This Plan establishes rules for trading and dealings within and between zones and to nearby ground water aquifers.

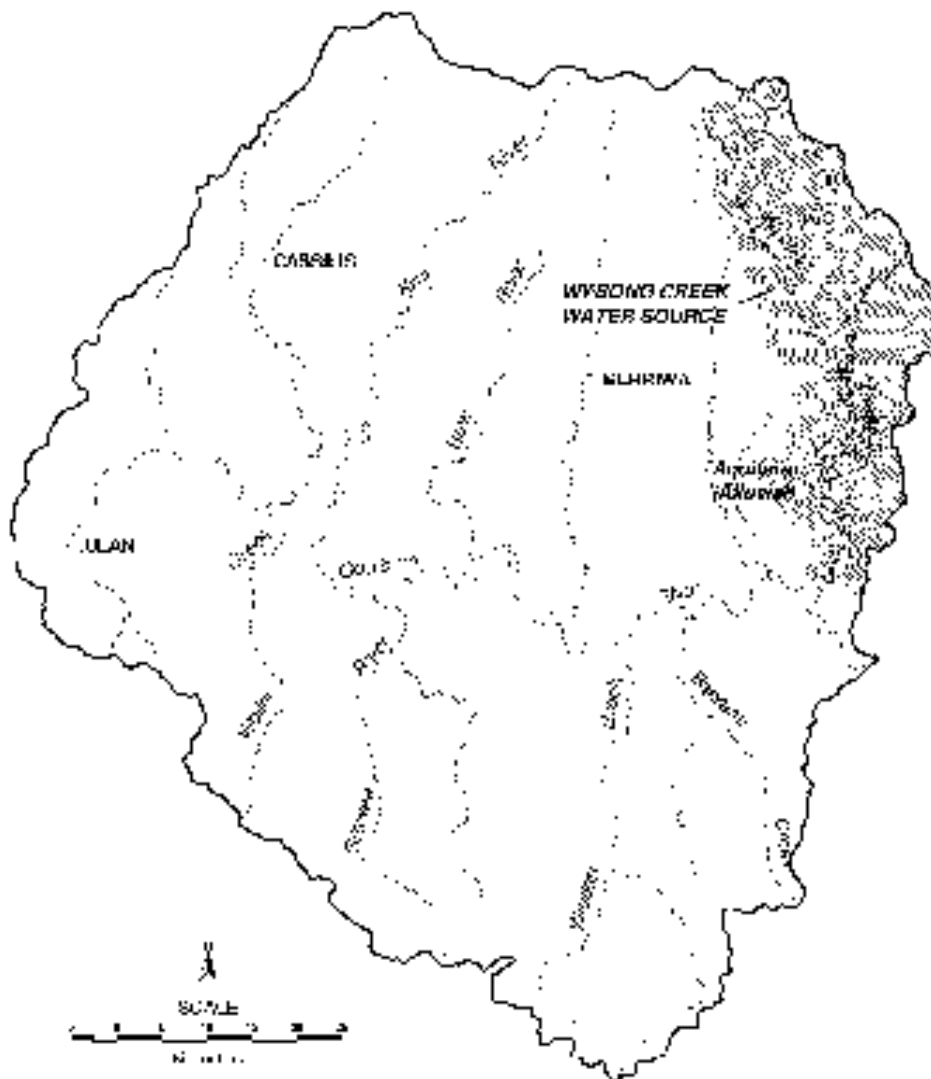
Target 35 All management plans incorporating water quality objectives that have considered Government approved Interim Environmental Objectives, the current Australian and New Zealand Environment and Conservation Council Guidelines and the recommendations of relevant Healthy Rivers Commission Inquiries

HIGH

- This Plan includes a generalised water quality objective.
- Committee has acknowledged water quality in Wybong Creek, particularly increasing salinity, turbidity, algae, etc as of concern and recognises salinity by proposing mandatory conditions for dams as well as protecting the first flush (24 hour rule).
- This Plan does provide a reasonable level of environmental protection which would assist in protecting water quality.
- This Plan provides for water quality management rules in Part 10 Division 4 in relation to groundwater.

Schedule 5 Goulburn Extraction Management Unit

This Unit excludes any river declared by the Minister, and published in the NSW Government Gazette, to be a regulated river, and all groundwater sources unless the groundwater source is established by a Plan made under sections 41 or 50 of the Act to be within this Unit.



Schedule 6 Access licences with access during very low flows

The access licences with the following numbers have access to very low flows in accordance with Clause 66A:

No licences at this time.

Note—

The access licences in this Schedule may change during the period of this Plan. The Regional Office of the Department of Infrastructure, Planning and Natural Resources, shown in Appendix 2, should be contacted for a current list.

- | | | | |
|--------------------------|--|---|---|
| (a) change in low flows. | 11 (a)
11 (b)
11 (c)
11 (f)
11 (g)
11 (i)
11 (j) | <ul style="list-style-type: none">• Assessment of change in flow duration characteristics, from the time of this Plan's commencement, at identified reference points. | <ul style="list-style-type: none">• River Flow Objectives (RFOs) 1, 2 and 6.
RFOs are the objectives agreed to by the NSW Government aimed at safeguarding river flows for environmental health. <p>Note—</p> <p>Not every objective is relevant to every river in NSW.</p> <ul style="list-style-type: none">• This Plan will contribute to a decrease in the frequency and duration of low flows.• This assessment will focus on this Plan's flow reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.• Where data is limited, it is only possible to assess change from the period of plan commencement to the time the indicator is assessed.• There will be a high climatic influence on changes to the flow characteristics, depending on if the time period of assessment has been wet or dry. |
|--------------------------|--|---|---|

- | | | | |
|---------------------------------------|--|--|--|
| (b) Change in moderate to high flows. | 11 (c)
11 (d)
11 (e)
11 (i)
11 (j) | <ul style="list-style-type: none">• Assessment of change in flow duration characteristics, from time of Plan commencement, at identified reference points. | <ul style="list-style-type: none">• RFO 3.• This Plan will maintain or increase the frequency and duration of moderate to high flows.• This assessment will focus on this Plan's flow reference point(s), and will be based on a qualitative assessment of compliance with the water sharing rules, due to the current modelling limitations in most unregulated rivers.• Where data is limited, it is only possible to assess change from the period of this Plan's commencement to the time the indicator is assessed.• There will be a high climatic influence on changes to the flow characteristics, depending on if the time period of assessment has been wet or dry. |
|---------------------------------------|--|--|--|

			<ul style="list-style-type: none"> • The ecological influence of the Plan is limited to providing for changes in flow regime aimed at improving the ecological condition of the water source and dependent ecosystems. • The focus of this performance indicator will be the effect of flow strategies. • Information on flow requirements of ecological systems is limited so physical or hydraulic surrogates will be used to assess the influence of the Plan. For example, the status of wetted area, depth in pools and flow velocity over riffles.
(c) Change in ecological condition of this water source and dependent ecosystems.	<p>11 (a) 11 (b) 11 (e) 11 (f) 11 (g) 11 (h) 11 (i) 11 (j) 11 (l)</p>	<ul style="list-style-type: none"> • Periodic assessment of identified attributes of this water source and dependent ecosystems. 	<ul style="list-style-type: none"> • In addition to the environmental water provisions defined in this Plan, there are many other factors that contribute to achievement of ecological objectives. Riparian vegetation, water quality, farming techniques, soil erosion, water flow patterns and other catchment characteristics all significantly influence ecological condition. It is difficult to assess which factor is the most influential at a particular time and place. • Research and development into the impacts of flow on ecological condition will be incorporated into assessment of the plan where the information is available and relevant.
(d) Extent to which basic landholder rights requirements have been met.	<p>11 (j) 11 (k)</p>	<p>Assessment of cease to pump levels in relation to basic rights requirements.</p>	<ul style="list-style-type: none"> • Basic landholder rights usage figures in water sharing plans are estimated (not actual use).

<p>(e) Change in economic benefits derived from water extraction and use.</p>	<p>11 (k) 11 (l) 11 (m)</p>	<ul style="list-style-type: none"> • Number of days access provided over the time of the plan. • Number of new off stream storages. • Change in unit price of water transferred. • Change in gross margins. 	<ul style="list-style-type: none"> • There are many factors affecting economic status of a region, for example commodity prices. • Measurement of the number of new off stream storages will indicate the adjustment to the rules and the ongoing access to water. • Assessment undertaken as part of plan performance monitoring will make assumptions to attempt to identify the impact of the plan provisions. • The data can reflect changes in crops, commodity prices, climate, water availability, economic climate and input costs.
<p>(f) Extent to which native title rights requirements have been met.</p>	<p>11 (l)</p>	<ul style="list-style-type: none"> • Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of five years there should be relevant information collected for each water source, as a minimum requirement.
<p>(g) Extent of recognition of spiritual, social and customary values of water to Aboriginal people.</p>	<p>11 (l)</p>	<ul style="list-style-type: none"> • Assessment of amount and type of information collected to identify the range of values of water to Aboriginal people. 	<ul style="list-style-type: none"> • The collection of information on the values associated with water is considered the first step in addressing the objects of the Act. It would be expected that at the end of 5 years there should be relevant information collected for each water source, as a minimum requirement.

Appendix 4 (Repealed)