

APPENDIX B

**WARREGO PAROO BULLOO NEBINE
WATER RESOURCE PLAN 2003**

Queensland



Subordinate Legislation 2003 No. 317

Water Act 2000

**WATER RESOURCE (WARREGO, PAROO,
BULLOO AND NEBINE) PLAN 2003**

TABLE OF PROVISIONS

Section		Page
PART 1—PRELIMINARY		
1	Short title	4
2	Commencement	4
3	Purposes of plan	4
4	Definitions	4
PART 2—PLAN AREA AND WATER TO WHICH PLAN APPLIES		
5	Plan area	5
6	Information about plan area	5
7	Nodes	5
8	Water to which plan applies	5
PART 3—OUTCOMES FOR SUSTAINABLE MANAGEMENT OF WATER		
9	Outcomes, including ecological outcomes, for the plan area	6
PART 4—PERFORMANCE INDICATORS AND OBJECTIVES		
<i>Division 1—Environmental flow objectives</i>		
10	Performance indicators for environmental flow objectives	7
11	Environmental flow objective (s 10(a))	8
12	Environmental flow objectives (s 10(b) to (e))	8
13	Environmental flow objectives (assessing impact of decisions)	8

<i>Division 2—Water allocation security objectives</i>		
14	Performance indicators for water allocation security objectives	9
15	Water allocation security objectives	9
PART 5—STRATEGIES FOR ACHIEVING OUTCOMES		
<i>Division 1—Preliminary</i>		
16	Strategies	10
<i>Division 2—Decisions made under this plan</i>		
17	Application of div 2	10
18	Decisions not to increase amount of water taken	11
19	Decisions consistent with objectives	11
20	Assessing impact of decisions	11
21	Calculation of performance indicators	12
<i>Division 3—Conversion of authorisations to water allocations</i>		
<i>Subdivision 1—General</i>		
22	Application of div 3	12
23	Location for taking water	12
<i>Subdivision 2—Supplemented water</i>		
24	Nominal volume for supplemented water	13
<i>Subdivision 3—Unsupplemented water</i>		
25	Maximum rate for taking unsupplemented water	13
26	Conditions for taking unsupplemented water	14
27	Volumetric limit for unsupplemented water	14
28	Nominal volume for unsupplemented water	15
<i>Division 4—Resource operations plan</i>		
29	Water sharing rules	15
30	Deciding operating arrangements, supply requirements and environmental management rules	16
31	Resource operations plan to meet interstate obligations	17
<i>Division 5—Regulation of overland flow water</i>		
32	Limitation on taking overland flow water—Act, s 20(6)	17
33	Decisions about taking overland flow water	18

*Water Resource (Warrego, Paroo, Bulloo and Nebine) No. 317, 2003
Plan 2003*

34	Taking water using existing works or reconfiguration of existing works authorised	18
35	Granting water licences for authorities under s 34	19
36	Granting or amending water licences under the resource operations plan . .	20
37	Relationship with Integrated Planning Act 1997.	20
	<i>Division 6—Strategic reserve</i>	
38	Unallocated water held as strategic reserve.	21
39	Limitation on allocation of unallocated water.	21
40	Dealing with unallocated water.	21
41	Matters chief executive must consider	22
	<i>Division 7—Miscellaneous provisions</i>	
42	Continued effect of moratorium notice—Act, s 46(3)	23
43	Measuring devices.	24
44	Taking water from waterholes or lakes	24
	PART 6—MONITORING AND REPORTING REQUIREMENTS	
45	Monitoring.	25
46	Monitoring programs undertaken by water infrastructure operators.	26
47	Water infrastructure operators to give reports	26
48	Minister’s report on plan—Act, s 53.	27
	PART 7—IMPLEMENTING AND AMENDING THIS PLAN	
49	Implementation schedule.	28
50	Minor or stated amendments of plan—Act, s 57.	29
	SCHEDULE 1	31
	PLAN AREA AND NODES	
	SCHEDULE 2	32
	NODE DESCRIPTIONS	
	SCHEDULE 3	33
	PUMP SIZES AND MAXIMUM RATES	
	SCHEDULE 4	34
	ALLOCATION OF UNALLOCATED WATER	
	SCHEDULE 5	35
	DICTIONARY	

PART 1—PRELIMINARY

1 Short title

This water resource plan may be cited as the *Water Resource (Warrego, Paroo, Bulloo and Nebine) Plan 2003*.

2 Commencement

(1) Part 5, division 5, commences on 1 July 2004.

(2) The remaining provisions commence on the day this plan is notified in the gazette.

3 Purposes of plan

The following are the purposes of this plan—

- (a) to define the availability of water in the plan area;
- (b) to provide a framework for sustainably managing water and the taking of water;
- (c) to identify priorities and mechanisms for dealing with future water requirements;
- (d) to provide a framework for establishing water allocations;
- (e) to provide a framework for reversing, where practicable, degradation that has occurred in natural ecosystems, including, for example, stressed rivers;
- (f) to regulate the taking of overland flow water.

4 Definitions

The dictionary in schedule 5 defines particular words used in this plan.

PART 2—PLAN AREA AND WATER TO WHICH PLAN APPLIES

5 Plan area

This plan applies to the area shown as the plan area on the map in schedule 1.

6 Information about plan area

(1) The exact location of the plan area boundary is held in digital electronic form by the department.

(2) The information held in digital electronic form can be reduced or enlarged to show the details of the boundary.¹

7 Nodes

(1) A node mentioned in this plan is a place—

- (a) on a watercourse in the plan area; and
- (b) for which environmental flow objectives are set for performance indicators.

(2) The location of each node is shown on the map in schedule 1 and described in schedule 2.

(3) Each node is identified on the map by a letter of the alphabet.

8 Water to which plan applies

This plan applies to the following water in the plan area—

- (a) water in a watercourse, lake or spring;
- (b) overland flow water.

¹ The boundary location in digital electronic form may be inspected at the department's head office, Brisbane.

PART 3—OUTCOMES FOR SUSTAINABLE MANAGEMENT OF WATER

9 Outcomes, including ecological outcomes, for the plan area

Water is to be allocated and managed in a way that seeks to achieve a balance in the following outcomes—

- (a) to make water available to sustain current levels of, and to support future growth in, economic activity in the plan area while recognising the social and cultural values of communities in the basin;
- (b) to provide increased security in water entitlements for water users, including protecting the probability of being able to obtain water under a water allocation;
- (c) to support tourism in the plan area, including by maintaining rivers and their surroundings of high tourism value;
- (d) to support an effective and efficient market in water allocations;
- (e) to make water from the basin available to be stored and used while retaining water for the riverine and associated environment;
- (f) to achieve ecological outcomes consistent with maintaining a healthy riverine environment, floodplains and wetlands, including, for example, maintaining—
 - (i) pool habitats, and native plants and animals associated with the habitats, in watercourses; and
 - (ii) natural riverine habitats that sustain native plants and animals; and
 - (iii) the natural abundance and species richness of native plants and animals associated with habitats within watercourses, riparian zones, floodplains and wetlands; and
 - (iv) active river-forming processes, including sediment transport; and
 - (v) the success of bird-breeding in the Currawinya Lakes system, the Paroo Overflow Lakes, the Bulloo Lakes and other significant wetland systems in the Paroo and Bulloo basins; and

- (vi) the unique genetic diversity of aquatic plants and animals within the Bulloo basin; and
- (vii) the near pristine condition of riverine habitats and associated native plants and animals within the Paroo and Bulloo basins;
- (g) to maintain water quality at levels acceptable for water use and to support natural ecological processes;
- (h) to promote a continual improvement in water use efficiency, both in the plan area generally and on individual properties;
- (i) to promote improved understanding of the matters affecting the health of riverine and associated systems in the basin;
- (j) to maintain beneficial flooding in the plan area;
- (k) consistency with Murray Darling Basin agreements and commitments, including the Murray Darling Basin Salinity Management Strategy and implementing a cap on the taking of water;
- (l) consistency with water sharing agreements and commitments between the State and New South Wales.

PART 4—PERFORMANCE INDICATORS AND OBJECTIVES

Division 1—Environmental flow objectives

10 Performance indicators for environmental flow objectives

The performance indicators for the environmental flow objectives are as follows—

- (a) end of system flow;
- (b) low flow;
- (c) summer flow;

- (d) beneficial flooding flow;
- (e) 1 in 2 year flood.

11 Environmental flow objective (s 10(a))

The environmental flow objective is that the end of system flow—

- (a) that crosses the border from the State into New South Wales be at least—
 - (i) from the Warrego and its distributory streams—89% of the end of system flow for the pre-development flow pattern; and
 - (ii) from the Paroo and its distributory streams—99% of the end of system flow for the pre-development flow pattern; and
 - (iii) from the Nebine and its distributory streams—87% of the end of system flow for the pre-development flow pattern; and
- (b) from the Bulloo at node A—be at least 99% of the end of system flow for the pre-development flow pattern.

12 Environmental flow objectives (s 10(b) to (e))

The environmental flow objectives are that at each node described in schedule 2, the extent to which a performance indicator, mentioned in section 10(b) to (e), expressed as a percentage of the same indicator for the pre-development flow pattern, is less than 66% or more than 133% be minimised.

13 Environmental flow objectives (assessing impact of decisions)

For making a decision mentioned in section 19(2), the environmental flow objectives are that—

- (a) the end of system flow be not less than the end of system flow immediately before the decision is made; and
- (b) at each node described in schedule 2, a performance indicator, mentioned in section 10(b) to (e), be—
 - (i) not less than the lesser of the following—

- (A) 66% of the indicator for the pre-development flow pattern;
- (B) the indicator immediately before the decision is made; and
- (ii) not more than the greater of the following—
 - (A) 133% of the indicator for the pre-development flow pattern;
 - (B) the indicator immediately before the decision is made.

Division 2—Water allocation security objectives

14 Performance indicators for water allocation security objectives

The performance indicators for the water allocation security objectives are—

- (a) the annual volume probability; and
- (b) the 45% annual volume probability.

15 Water allocation security objectives

For making a decision mentioned in section 19(2), the water allocation security objectives are that—

- (a) the annual volume probability for a water allocation group be not less than the annual volume probability for the group immediately before the decision is made; and
- (b) the 45% annual volume probability for a water allocation group be not less than the 45% annual volume probability for the group immediately before the decision is made.

PART 5—STRATEGIES FOR ACHIEVING OUTCOMES

Division 1—Preliminary

16 Strategies

(1) This part states the strategies for achieving the outcomes mentioned in part 3.

(2) The strategies—

- (a) form part of a broad framework for the management of natural resources; and
- (b) complement other activities, including the National Action Plan for Salinity and Water Quality, for advancing the sustainable management of water.

Division 2—Decisions made under this plan

17 Application of div 2

This division applies to decisions about the allocation or management of water in the plan area, other than a decision—

- (a) about a water permit; or
- (b) about reinstating or replacing an expired licence; or
- (c) under the *Integrated Planning Act 1997*, about taking overland flow water mentioned in section 32(1)(a) or (e); or
- (d) to grant a water entitlement to a local government or a government agency for supply under operations that were in existence before 9 June 2001; or
- (e) to grant a water entitlement to an owner of land, other than land adjoining a watercourse, lake or spring, to take water for stock or domestic purposes using works that were in existence before 9 June 2001.

18 Decisions not to increase amount of water taken

(1) The chief executive must not make a decision that would increase the average volume of water available to be taken in the plan area.

(2) Subsection (1) does not apply to a decision about unallocated water made under section 40.

(3) However, subsection (1) applies to a decision about an application, in relation to taking water under an authorisation, made but not dealt with before the commencement of this plan.

19 Decisions consistent with objectives

(1) A decision made in preparing the first resource operations plan must be consistent with the environmental flow objectives mentioned in sections 11 and 12.

(2) All other decisions, including making the water allocation change rules in preparing the resource operations plan, must be consistent with—

- (a) the environmental flow objectives mentioned in sections 12 and 13; and
- (b) the water allocation security objectives mentioned in section 15.

20 Assessing impact of decisions

(1) The IQQM computer program's simulation for the simulation period is used to assess—

- (a) for section 18—whether the average volume of water available to be taken would increase; and
- (b) for section 19—consistency with the objectives.

(2) Subsection (1)(a) does not apply to a decision to refuse an application if approving the application would clearly increase the average volume of water available to be taken in the plan area.

(3) Subsection (1) does not limit the matters the chief executive may have regard to in assessing the matters mentioned in subsection (1).

(4) If it is not practicable to use the IQQM computer program, another assessment method approved by the chief executive may be used.

(5) The chief executive may approve an assessment method for subsection (4) only if the chief executive is satisfied the method will assess the matters mentioned in subsection (1) at least as accurately as the IQQM computer program.

21 Calculation of performance indicators

(1) The performance indicators mentioned in part 4 are calculated on the assumption the unallocated water mentioned in section 39 is being taken.

(2) Subsection (3) applies to a decision—

- (a) that will result in the addition of a water allocation to, or the omission of a water allocation from, a water allocation group; or
- (b) to grant an application under section 129 or 130 of the Act to change a water allocation.

(3) In assessing the decision's consistency with the water allocation security objectives, the performance indicators are calculated on the assumption the water allocation being added, omitted or changed is not part of any water allocation group.

Division 3—Conversion of authorisations to water allocations

Subdivision 1—General

22 Application of div 3

This division applies only to—

- (a) authorisations converted, under the resource operations plan, to water allocations; and
- (b) water allocations converted, under the resource operations plan, from authorisations.

23 Location for taking water

The location, for taking water, stated on a water allocation must—

- (a) contain the place at which water could have been taken under the authorisation; and
- (b) for a water allocation to take supplemented water—be contained within the water supply scheme that contains the place at which water could have been taken under the authorisation.

Subdivision 2—Supplemented water

24 Nominal volume for supplemented water

The nominal volume for a water allocation to take supplemented water is the annual volume for supplemented water stated on the authorisation.

Subdivision 3—Unsupplemented water

25 Maximum rate for taking unsupplemented water

(1) The maximum rate for taking water, for a water allocation to take unsupplemented water, is the rate in megalitres a day decided by the chief executive having regard to—

- (a) for an authorisation that states, in the schedule of terms on the authorisation, a rate for taking water—the stated rate; and
- (b) for an authorisation that states a pump size, other than for an axial flow pump—the information about pump sizes and maximum rates in schedule 3, columns 1 and 2; and
- (c) for an authorisation that states a pump size, for an axial flow pump—the information about pump sizes and maximum rates in schedule 3, columns 1 and 3; and
- (d) for an authorisation that states both a rate and a pump size, the lesser of the following—
 - (i) the rate decided under paragraph (a);
 - (ii) the rate decided under paragraph (b) or (c); and
- (e) for another authorisation—the terms or conditions under which water may be taken under the authorisation.

(2) If an authorisation includes a condition limiting the total rate for taking water for the authorisation and any other authorisations, the chief executive must have regard to the condition in deciding the maximum rate for taking water under the water allocations to which the authorisations are converted.

26 Conditions for taking unsupplemented water

(1) In deciding the conditions under which unsupplemented water may be taken under a water allocation, the chief executive must have regard to—

- (a) the terms or conditions stated on the authorisation; and
- (b) any existing water sharing arrangements that relate to the authorisation.

(2) Subsection (3) applies if—

- (a) the authorisation was for water harvesting; and
- (b) the water that could have been taken by water harvesting could have been stored in a storage that is works that allow taking overland flow water.

(3) The chief executive must impose a condition on the allocation to ensure there is no increase in the volume of overland flow water the storage may take.

27 Volumetric limit for unsupplemented water

In deciding the volumetric limit for taking water under an allocation for unsupplemented water, the chief executive must have regard to—

- (a) for an authorisation to supply town water that states an annual volume—the stated annual volume; and
- (b) for all other authorisations—
 - (i) the maximum rate for taking the water, decided under section 25; and
 - (ii) the conditions for taking the water, decided under section 26; and
 - (iii) for an authorisation that states an area that may be irrigated—

- (A) the local availability of water; and
- (B) the volume of water estimated by the chief executive to be necessary to efficiently irrigate the types of crops grown in the part of the plan area to which the authorisation relates; and
- (iv) for other authorisations—the availability of water in the part of the plan area for the water allocation group to which the allocation relates.

28 Nominal volume for unsupplemented water

The nominal volume for a water allocation to take unsupplemented water is the volume decided by the chief executive having regard to—

- (a) the local availability of water; and
- (b) the maximum rate for taking the water, decided under section 25; and
- (c) the conditions for taking the water, decided under section 26; and
- (d) the volumetric limit for the water, decided under section 27; and
- (e) the water sharing rules in the resource operations plan.

Division 4—Resource operations plan

29 Water sharing rules

(1) The water sharing rules in the resource operations plan must state the circumstances under which a water allocation holder—

- (a) may start taking water; and
- (b) must stop taking water.

(2) In deciding the water sharing rules, the chief executive must have regard to—

- (a) any existing water sharing arrangements for the water to which the rules are to apply; and
- (b) existing water sharing rules for water in the plan area; and
- (c) the following—

- (i) the maximum rates for taking water, decided under section 25; and
- (ii) the conditions for taking water, decided under section 26; and
- (iii) the volumetric limits for water, decided under section 27; and
- (d) any agreements between the State and New South Wales about sharing water; and
- (e) the unallocated water mentioned in section 39; and
- (f) any other authorisations to take water in the part of the plan area; and
- (g) for authorisations that state an area that may be irrigated—the local availability of water; and
- (h) for other authorisations—the availability of water in the part of the plan area for the water allocation group to which the allocations relate.

30 Deciding operating arrangements, supply requirements and environmental management rules

(1) In deciding the operating arrangements and supply requirements for water infrastructure and the environmental management rules for the resource operations plan, the chief executive must consider—

- (a) the impact of the infrastructure's operation on the following—
 - (i) water quality and temperature;
 - (ii) instream water levels;
 - (iii) the natural movement of sediment;
 - (iv) the bed and banks of watercourses;
 - (v) riparian vegetation;
 - (vi) habitats for native plants and animals; and
- (b) the extent to which rapid artificial variations in instream water levels, caused by the operation of the infrastructure, may adversely affect natural ecosystems; and

- (c) the impact of the infrastructure on the movement of fish and other aquatic species; and
- (d) whether the movement of water from a watercourse to another watercourse is likely to adversely affect the watercourse to which the water is moved; and
- (e) the likelihood of fish deaths caused by the operation of the infrastructure.

(2) Subsection (1)—

- (a) applies only if the arrangements, requirements or rules are a change from the existing practice; and
- (b) does not limit the matters the chief executive may consider.

31 Resource operations plan to meet interstate obligations

The chief executive must ensure the resource operations plan gives effect to any agreement made between the State and New South Wales about water in the plan area.

Division 5—Regulation of overland flow water

32 Limitation on taking overland flow water—Act, s 20(6)

- (1)** A person may not take overland flow water other than—
- (a) for stock or domestic purposes;² or
 - (b) under an authority under section 34; or
 - (c) under an authorisation; or
 - (d) unallocated water granted to the person under the resource operations plan; or
 - (e) overland flow water—
 - (i) of not more than the amount necessary to satisfy the requirements of an environmental authority issued under the *Environmental Protection Act 1994*; or

² See the Act, section 20(4).

- (ii) taken for rehabilitating degraded land; or
- (iii) that is contaminated agricultural runoff water.

(2) In this section—

“contaminated agricultural runoff water” has the meaning given by the ‘Code for Assessable Development for Operational Works for Taking Overland Flow Water’.³

33 Decisions about taking overland flow water

(1) In deciding an application under the Act or the *Integrated Planning Act 1997* about taking overland flow water, the chief executive must consider whether granting the application is likely to adversely affect—

- (a) cultural values, including, for example, cultural values of local Aboriginal communities; or
- (b) natural aquatic ecosystems, including, for example, natural wetlands; or
- (c) users of overland flow water downstream of the area to which the application relates.

(2) However, subsection (1) does not apply to an application—

- (a) for a water permit; or
- (b) to reinstate or replace an expired licence.

34 Taking water using existing works or reconfiguration of existing works authorised

(1) Subsection (2) applies to the owner of land on which either of the following is situated—

- (a) existing works;⁴
- (b) works that—
 - (i) are a reconfiguration of existing works; and

³ A copy of the code is available on the department’s website.

⁴ See schedule 5, definition “existing works”, paragraph 2.

- (ii) do not increase the average annual volume of water taken above the average annual volume taken using the existing works.

(2) The owner may continue to take overland flow water, using the works—

- (a) for 1 year after the commencement of this section; and
- (b) if the owner gives the chief executive notice of the works, in the approved form, and any further information required by the chief executive about the works—after the notice and information are given.

35 Granting water licences for authorities under s 34

(1) This section applies if—

- (a) an owner of land is authorised under section 34 to continue taking overland flow water using works; and
- (b) the chief executive is satisfied there has been, or may be, an increase, in the average annual volume of overland flow water taken using the works, above the average annual volume that could have been taken under the operating arrangements in place immediately before the commencement of this plan.

(2) The chief executive must—

- (a) under section 212⁵ of the Act, grant a water licence to replace the authority under section 34; and
- (b) impose a condition on the licence to ensure the average annual volume of overland flow water that may be taken using the works is not more than the average annual volume that could have been taken under the operating arrangements in place immediately before the commencement of this plan.

5 Section 212 (Granting a water licence under a plan process) of the Act

36 Granting or amending water licences under the resource operations plan

(1) For granting, under section 212 of the Act, a water licence to replace an authority under section 34, the resource operations plan—

- (a) must state the parts of the plan area in which an authority may be replaced by a water licence; and
- (b) must state the works to which each authority relates; and
- (c) must consider the extent to which the works allow the taking of—
 - (i) overland flow water under an authority under section 34; and
 - (ii) water under another authorisation; and
- (d) to meet the objectives and achieve the outcomes of this plan, may reduce the volume of overland flow water allowed to be taken in a part of the plan area mentioned in paragraph (a) by deciding—
 - (i) the volume of overland flow water available for allocation in the part; and
 - (ii) the share available under each authority to take overland flow water in the part.

(2) The resource operations plan may also decide the share of the water mentioned in subsection (1)(d)(i) available under a water licence granted under section 35 for a part of the plan area mentioned in subsection (1)(a).

(3) Section 217 of the Act applies to the amendment of the licence for consistency with the resource operations plan.

37 Relationship with Integrated Planning Act 1997

(1) Works that allow taking overland flow water, other than works mentioned in subsection (3), are assessable development for the *Integrated Planning Act 1997*, schedule 8, part 1, item 3B(c)(i).

(2) Subsection (1) does not apply to repairs or maintenance to works mentioned in section 34 or works constructed under a development permit, that do not alter the design of the works.

(3) Works for taking overland flow water for stock or domestic purposes are self-assessable development for the *Integrated Planning Act 1997*, schedule 8, part 2, item 9A(b)(i).

Division 6—Strategic reserve

38 Unallocated water held as strategic reserve

Unallocated water is held as a strategic reserve and dealt with under this division.

39 Limitation on allocation of unallocated water

(1) The allocation of unallocated water is limited to—

- (a) the parts of the plan area mentioned in schedule 4, column 1; and
- (b) the average annual volume mentioned for each of the parts in schedule 4, column 2; and
- (c) water for a use mentioned for each of the parts in schedule 4, column 3.

(2) Subsection (1)(b) applies to water from a watercourse, lake or spring.

(3) However, the chief executive may instead allow an equivalent volume of water to be taken as overland flow water.

(4) For subsection (3), an equivalent volume is the volume, decided by the chief executive, that would have an equivalent impact on the end of system flow downstream of the part of the plan area from which the water would be taken.

40 Dealing with unallocated water

Unallocated water may be—

- (a) granted under a licence granted for a project declared under the *State Development and Public Works Organisation Act 1971* to be a significant project; or
- (b) granted or reserved under a process in the resource operations plan.

41 Matters chief executive must consider

(1) In dealing with unallocated water, the chief executive must consider—

- (a) the need for, and efficiency of, present and proposed uses of water including—
 - (i) the extent to which water is being taken under current authorisations in the plan area; and
 - (ii) emerging requirements in the plan area for additional water and the likely timeframe in which the additional water will be required; and
 - (iii) alternative water sources including, for example, recycled water and water savings from improvements in the efficiency of water use; and
- (b) the availability of an alternative water supply for the purpose for which the water is required; and
- (c) the impact the proposed taking of, or interfering with, the water may have on the following—
 - (i) water quality;
 - (ii) inundation of habitats;
 - (iii) the movement of fish and other aquatic species;
 - (iv) the natural movement of sediment;
 - (v) recreation and aesthetic values;
 - (vi) cultural values, including, for example, cultural values of local Aboriginal communities; and
- (d) whether the proposed taking or interfering with, or the proposed use of, water is likely to have a direct adverse effect on groundwater; and
- (e) whether the proposed taking or interfering with, or the proposed use of, water is likely to lead to degradation, particularly salinity, of land or downstream watercourses including watercourses in the Murray Darling Basin.

(2) Subsection (1) does not limit the matters the chief executive may consider.

Division 7—Miscellaneous provisions

42 Continued effect of moratorium notice— Act, s 46(3)

(1) This section amends and continues, in part, the effect of the public notice of the proposed preparation of a water management plan for the plan area—

- (a) taken, under section 1039(2)(b) of the Act, to be a moratorium notice; and
- (b) amended on 9 June 2001, 16 August 2001 and 29 October 2001.

(2) Until the resource operations plan is approved—

- (a) new works must not be physically started; and
- (b) completed, or partly completed, works in existence must not be raised, enlarged or deepened.

(3) Subsection (2) applies only to—

- (a) works that would increase the taking of water from a watercourse, lake or spring; and
- (b) works for taking water from a watercourse, lake or spring that would increase the taking of overland flow water in the plan area; and
- (c) works that would increase the taking of overland flow water.

(4) This section does not apply to—

- (a) works for taking water under an authorisation that states an area that may be irrigated; or
- (b) works for taking only supplemented water; or
- (c) works being completed in accordance with a variation of the moratorium notice mentioned in subsection (1); or
- (d) works for taking water under a water permit; or
- (e) works for taking water under section 20(2), (3), (4) or (5) of the Act; or
- (f) works that have been physically started if—
 - (i) under the moratorium notice, the works could be continued; and

(ii) the works are being completed in accordance with the moratorium notice; and

(iii) within 20 business days after the commencement of this plan, the owner of the works gives the chief executive notice that the works are being completed.

(5) However, this section applies to works for storing water taken under an authorisation mentioned in subsection (4)(a).

(6) Subsection (3)(c) expires on 30 June 2004.

43 Measuring devices

(1) A measuring device must be used to measure the volume of the following—

(a) water taken under a water entitlement to take water in the plan area;

(b) floodwater taken.

(2) Subsection (1) applies in the circumstances mentioned and on the day a regulation prescribes the matters mentioned in section 1014(2)(d) of the Act, in relation to meters.

44 Taking water from waterholes or lakes

(1) This section applies to the chief executive—

(a) in making the water allocation change rules in preparing the resource operations plan; and

(b) in deciding an application to change the location from which water may be taken under a water allocation.

(2) If a change in the location from which water may be taken under a water allocation would allow the taking of water from a waterhole or lake, the chief executive must impose a condition on the allocation that water may be taken from the waterhole or lake only if the water level in the waterhole or lake is above the level that is 0.5 m below the level at which it naturally overflows.

(3) However, the chief executive need not impose a condition mentioned in subsection (2) if the chief executive is satisfied the taking of water from

the waterhole or lake will not adversely affect its cultural and ecological values.

PART 6—MONITORING AND REPORTING REQUIREMENTS

45 Monitoring

(1) The monitoring requirements for the plan are—

(a) water monitoring for—

- (i) volume, frequency, duration and season of streamflows; and
- (ii) taking water; and
- (iii) water quality; and

(b) natural ecosystems monitoring, for the condition of riverine habitats including the following—

- (i) waterholes and lake ecosystems;
- (ii) stream-bed habitats;
- (iii) upper and in-channel riparian zones;
- (iv) floodplains;
- (v) wetlands.

(2) The monitoring requirements are to be achieved by—

- (a) monitoring programs undertaken by water infrastructure operators under a resource operations plan; and
- (b) monitoring programs undertaken by community groups with relevant State agencies; and
- (c) monitoring programs administered by relevant State agencies.

46 Monitoring programs undertaken by water infrastructure operators

(1) Each water infrastructure operator must develop and undertake monitoring programs, satisfactory to the chief executive, that include monitoring water, for the matters stated in section 45(1)(a), in the water supply scheme in which the operator manages water.

(2) The programs must include monitoring the following—

- (a) water quantity including—
 - (i) the flow of water at gauging stations; and
 - (ii) the volume and rate at which, and times when, water is supplied and taken; and
 - (iii) inflows of water to dams or weirs; and
 - (iv) the quantity of water released from a dam or weir for each of the following—
 - (A) consumption;
 - (B) the environment;
 - (C) the operation of fish ways;
 - (D) any other purpose stated by the chief executive; and
 - (v) the level of water in a dam or weir;
- (b) water quality including—
 - (i) temperature; and
 - (ii) biological, chemical and physical measurements;
- (c) the operation of outlet works for a dam including, for example, multi-level offtakes.

(3) The monitoring programs must assist in enabling the chief executive to assess the effectiveness of the strategies under part 5.

47 Water infrastructure operators to give reports

(1) Each water infrastructure operator must give the chief executive a written report containing the following—

- (a) details of the information obtained by monitoring the matters mentioned in section 46;

- (b) details of decisions made by the operator in managing water and water infrastructure, including, for example, decisions about the following—
 - (i) making water available to water users under the operator's usual procedures for managing water in a water supply scheme;
 - (ii) managing the flow of water;
 - (iii) restrictions on the taking or supply of water;
 - (iv) infrastructure modifications or installations;
 - (c) information about any non-compliance by the operator with a resource operations plan for the area;
 - (d) details about remedial action taken by the operator—
 - (i) in relation to a requirement under a resource operations plan; or
 - (ii) in response to an event or thing affecting water quality;
 - (e) details of any emergency action taken by the operator that may affect the achievement of the outcomes under part 3.
- (2)** A report about a matter mentioned in subsection (1)(a), (1)(b)(i) or (1)(b)(ii) must be given—
- (a) for each financial year in which the operator manages water under this plan; and
 - (b) within 3 months after the end of the financial year to which the report relates.
- (3)** A report about a matter mentioned in subsection (1)(b)(iii), (1)(b)(iv), (1)(c) or (1)(d) must be given within 1 month after the matter happens.
- (4)** A report about a matter mentioned in subsection (1)(e) must be given the next business day after the action is taken.

48 Minister's report on plan—Act, s 53

- (1)** The Minister's report⁶ on this plan must be prepared—

⁶ See section 54 (Matters the reports must include) of the Act.

- (a) for the first report—after the commencement of the resource operations plan; or
 - (b) for subsequent reports—for each financial year this plan is in force and within 6 months after the end of the financial year to which the report relates.
- (2) The report prepared 5 years after the commencement of this plan must include information on—
- (a) the accuracy of flow gauging in the plan area; and
 - (b) community views on implementation of this plan; and
 - (c) the appropriateness of the performance indicators for achieving this plan's outcomes.

PART 7—IMPLEMENTING AND AMENDING THIS PLAN

49 Implementation schedule

- (1) This section states—
- (a) the proposed arrangements for implementing this plan; and
 - (b) the priorities for the conversion to, or granting of, water allocations.
- (2) Within 1 year after the commencement of this plan, it is proposed to prepare a resource operations plan—
- (a) to convert the following authorisations to water allocations—
 - (i) authorisations to take supplemented water;
 - (ii) authorisations to take unsupplemented water, other than authorisations that state an area that may be irrigated or authorisations for water spreading; and
 - (b) to make environmental management rules, water sharing rules, water allocation change rules and seasonal water assignment rules; and
 - (c) to implement the monitoring requirements in part 6.

(3) Section 217 of the Act applies to the part of an authorisation, mentioned in subsection (2)(a), that is a water licence not converted to a water allocation.

(4) Within 5 years after the commencement of this plan, it is proposed to prepare a new resource operations plan or amend the plan mentioned in subsection (2) to convert to water allocations authorisations to take unsupplemented water that state an area that may be irrigated.

(5) Subsections (2) and (4) do not limit the matters that may be included in the resource operations plan.

(6) In this section—

“**authorisation**” does not include an authorisation to take overland flow water.

50 Minor or stated amendments of plan—Act, s 57

The following types of amendment may be made to this plan under section 57(b) of the Act—

- (a) an amendment of an environmental flow objective or a water allocation security objective, or a performance indicator for an objective, if the amendment achieves an equivalent or improved environmental flow and water allocation security outcome;
- (b) an amendment to part 5, division 3,⁷ that—
 - (i) does not adversely affect meeting the environmental flow objectives or water allocation security objectives or achieving the outcomes; and
 - (ii) does not result in a water allocation holder being able to take less water under the allocation than the holder would have been able to take before the amendment;
- (c) an amendment to section 42⁸ if notice of the amendment is published as if it were a moratorium notice under section 26 of the Act;
- (d) an amendment or addition of a monitoring or reporting requirement under part 6;

⁷ Part 5, division 3 (Conversion of authorisations to water allocations)

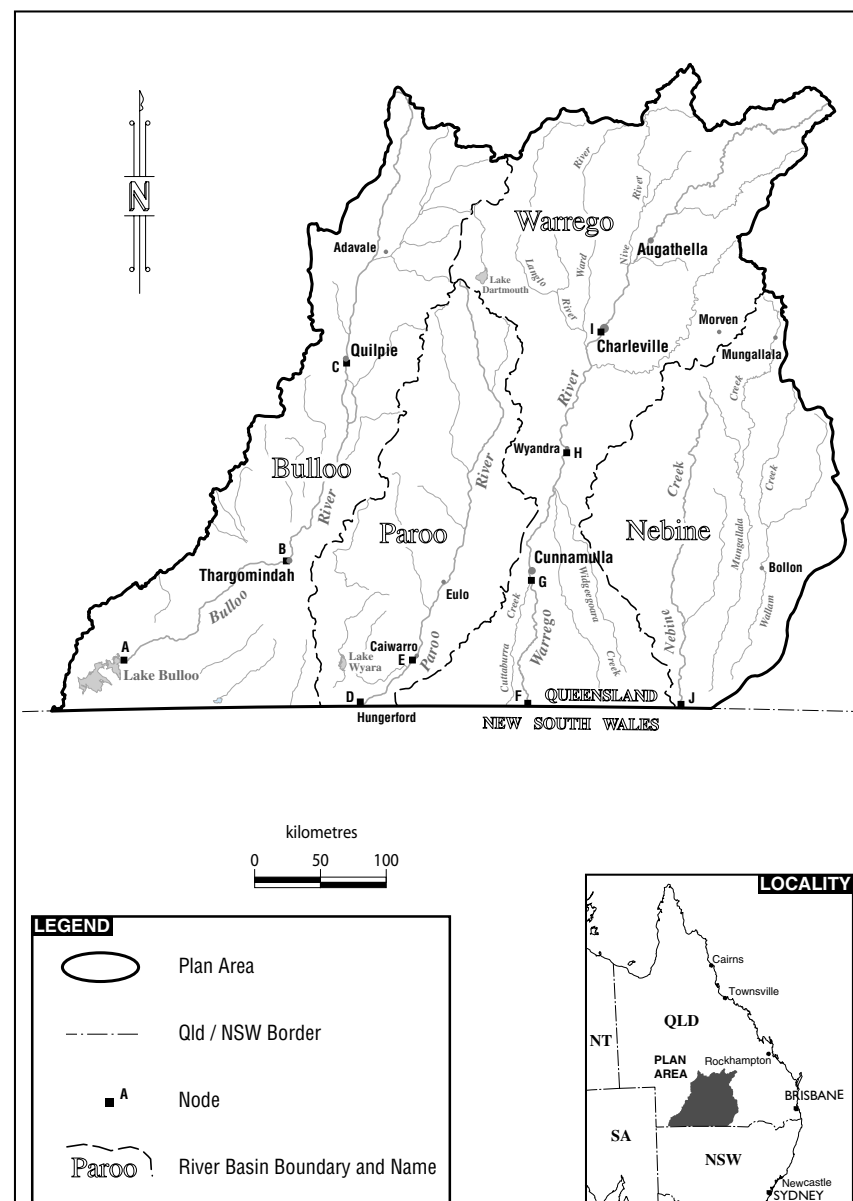
⁸ Section 42 (Continued effect of moratorium notice—Act, s 46(3))

- (e) an amendment of schedule 5, definition “works that allow taking overland flow water”.

SCHEDULE 1

PLAN AREA AND NODES

sections 5 and 7 and schedule 5, definition "plan area"



SCHEDULE 2

NODE DESCRIPTIONS

sections 7, 12 and 13

Node	Location
A	Bulloo River at the inflow to Lake Bulloo
B	Bulloo River at Thargomindah stream gauging station (AMTD 219.7 km)
C	Bulloo River at Quilpie stream gauging station (AMTD 405.9 km)
D	Paroo River at the border of the State and New South Wales
E	Paroo River at Caiwarro stream gauging station (AMTD 57.3 km)
F	Warrego River at the border of the State and New South Wales
G	Warrego River at Cunnamulla Weir stream gauging station (AMTD 24.5 km)
H	Warrego River at Wyandra stream gauging station (AMTD 238.2 km)
I	Warrego River at Charleville stream gauging station (AMTD 383 km)
J	Nebine Creek at the border of the State and New South Wales

SCHEDULE 3

PUMP SIZES AND MAXIMUM RATES

section 25

Column 1	Column 2	Column 3
Pump size (mm)	Maximum rate (ML/day)	Maximum rate (ML/day)
32	0.5	
40	1	
50	2.2	
65	3.9	
80	5.6	
100	7.3	
125	7.3	
150	12.1	
200	15.6	
250	21.6	
300	25.9	
350	34.6	
375 to 400	43.2	
500	47.5	70
600 to 610	86.4	120
660	120	
700 to 720	150	200
750 to 770	180	220
780 to 810	200	235

SCHEDULE 4

ALLOCATION OF UNALLOCATED WATER

section 39

Column 1	Column 2	Column 3
Part of the plan area	Average annual volume	Use
Catchment of the Bulloo River	100 ML	Town water supply, ecotourism or similar use
Catchment of the Bulloo River	500 ML	Any
Catchment of the Paroo River	100 ML	Town water supply, ecotourism or similar use
Catchment of the Warrego River	100 ML	Town water supply, ecotourism or similar use
Catchment of the Warrego River	8 000 ML	Any
Catchment of the Nebine River	100 ML	Town water supply, ecotourism or similar use
Catchment of the Nebine River	1 000 ML	Any

SCHEDULE 5

DICTIONARY

section 4

“1 in 2 year flood” means the daily flow that has a 50% probability of being reached at least once a year.

“45% annual volume probability”, for a water allocation group for taking unsupplemented water, means the percentage of years in the simulation period in which the volume of water that may be taken by the group is at least 45% of the total of the nominal volumes for the group.

“AMTD” means the adopted middle thread distance which is the distance in kilometres, measured along the middle of a watercourse, that a specific point in the watercourse is from the watercourse’s mouth, the watercourse’s junction with the main watercourse or the border between the State and New South Wales.

“annual volume probability” means—

- (a) for a water allocation group for taking unsupplemented water—the percentage of years in the simulation period in which the volume of water that may be taken by the group is at least the total of the nominal volumes for the group; and
- (b) for a water allocation group for taking supplemented water—the average annual volume of water that may be taken by the group in the simulation period as a percentage of the total of the nominal volumes for the group.

“authorisation”—

- (a) means a licence, permit or other authority to take water given under the Act or the repealed Act, other than a permit for stock or domestic purposes; and
- (b) includes, for part 5, division 3, a development permit for works for taking water under the authorisation.

SCHEDULE 5 (continued)

“average volume of water available to be taken” means the total volume of water allowed to be taken under authorisations, calculated for the simulation period.

“beneficial flooding flow” means the median of the wet season 90-day flows for the years in the simulation period.

“daily flow”, for a node, means the volume of water that flows past the node in a day.

“end of system flow” means the volume of water that flows past a stated point in the simulation period.

“existing works” —

1. “Existing works” means works that—
 - (a) allow taking overland flow water; and
 - (b) either—
 - (i) were in existence on 9 June 2001; or
 - (ii) were started, but not completed by 9 June 2001 and—
 - (A) if a variation to a moratorium notice was granted for the works under section 27 of the Act—have been, or are being, completed in accordance with the moratorium notice, as varied; or
 - (B) if subsubparagraph (A) does not apply—were completed by 30 November 2001.
2. The term does not include works that allow taking overland flow water only for stock or domestic purposes.⁹

“groundwater” means water from an underground source.

“IQQM computer program” means the department’s Integrated Quantity and Quality Modelling computer program, and associated modelling, statistical analysis and reporting programs, that simulate daily stream flows, flow management, storages, releases, instream infrastructure, water extractions, water demands and other hydrologic events in the plan area.

⁹ See section 20 (Authorised taking of water without water entitlement) of the Act.

SCHEDULE 5 (continued)

“low flow” means the total number of days in the simulation period in which the daily flow is not more than half the pre-development median daily flow.

“node” see section 7.

“plan area” means the area shown as the plan area on the map in schedule 1.

“pre-development flow pattern” means the pattern of water flows, during the simulation period, decided by the chief executive using the IQQM computer program as if—

- (a) there were no dams or other water infrastructure on watercourses in the plan area; and
- (b) no water was taken under authorisations from watercourses or floodplains in the plan area.

“pre-development median daily flow” means the median of the daily flows in the simulation period for the pre-development flow pattern.

“resource operations plan” means the resource operations plan to implement this plan.

“simulation period” means the period from 1 January 1889 to 31 December 1999.

“started”, for existing works, means —

- (a) construction of the works had physically started, or if construction had not physically started, a contract had been entered into to start construction, and construction had started, by 8 August 2001; and
- (b) an independently verifiable construction program existed for progressive construction towards completion of the works; and
- (c) detailed design plans existed showing, among other things, the extent of the works; and
- (d) if a permit under the *Local Government Act 1993*, section 940¹⁰ was required for the works—the permit had been issued; and

¹⁰ *Local Government Act 1993*, section 940 (Issue of permit)

SCHEDULE 5 (continued)

- (e) if a development permit was required for the works—the permit had been given.

“summer” means the period from 1 December in a year until the end of February in the following year.

“summer flow” means the average number of summer flow days in the simulation period.

“summer flow day”, for a summer, means a day in the summer in which the daily flow is more than the pre-development median daily flow.

“supplemented water” means water supplied under an interim resource operations licence, resource operations licence or other authority to operate water infrastructure.

“unsupplemented water” means water that is not supplemented water.

“water allocation group” means—

- (a) for taking supplemented water—the water allocations in a priority group in a water supply scheme; and
- (b) for taking unsupplemented water—the water allocations in a part of the plan area stated in the resource operations plan.

“waterhole” means a part of a watercourse that contains water after the watercourse ceases to flow, other than a part of a watercourse that is within the storage area of a dam on the watercourse.

“wet season 90-day flow”, for a year, means the total flow in the continuous 90 day period with the highest total of daily flows.

“works that allow taking overland flow water” include—

- (a) storages, sumps, drains, embankments, channels and pumps for taking, or that can be used for taking, overland flow water; and
- (b) storages that are connected to the works mentioned in paragraph (a); and
- (c) works that make, or that can be used to make, the original connection between the storages mentioned in paragraph (b) and the works mentioned in paragraph (a).

ENDNOTES

1. Approved by the Governor in Council on 4 December 2003.
2. Notified in the gazette on 5 December 2003.
3. Laid before the Legislative Assembly on . . .
4. The administering agency is the Department of Natural Resources and Mines.