

Water Act 2000

Water Resource (Barron) Plan 2002

Reprinted as in force on 27 November 2009

Reprint No. 1A

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This page is specific to this reprint. See previous reprint for information about earlier changes made under the Reprints Act 1992. A table of reprints is included in the endnotes.

Also see endnotes for information about-

- when provisions commenced
- editorial changes made in earlier reprint.

Spelling

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Water Resource (Barron) Plan 2002

[as amended by all amendments that commenced on or before 27 November 2009]

Part 1 Preliminary

1 Short title

This water resource plan may be cited as the *Water Resource* (*Barron*) *Plan* 2002.

2 Purposes of plan

The purposes of this plan are-

- (a) for both surface and subartesian water, the following—
 - (i) to define the availability of water in the plan area;
 - (ii) to provide a framework for sustainably managing water and the taking of water;
 - (iii) to identify priorities and mechanisms for dealing with future water requirements;
 - (iv) to provide a framework for reversing, where practicable, degradation that has occurred in natural ecosystems; and
- (b) for surface water only—to provide a framework for establishing water allocations.

3 Definitions

The dictionary in schedule 10 defines particular words used in this plan.

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Part 2 Areas and water to which plan applies

4 Plan area

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

5 Subartesian areas

Each part of the plan area shown as a subartesian area on the map in schedule 2 is a subartesian area for this plan.

6 Subartesian management areas

The Atherton Subartesian Area consists of—

- (a) subartesian management area A, shown on the map in schedule 2; and
- (b) subartesian management area B, shown on the map in schedule 2.

7 Subcatchment areas

Each part of the plan area that is within a subcatchment area shown on the map in schedule 3 is a subcatchment area for this plan.

7A Water management area

The plan area is a water management area called the Barron Water Management Area.

8 Information about areas

(1) The exact location of the plan area, subartesian area, subartesian management area and subcatchment area boundaries 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 boundaries.¹

9 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 4.
- (3) Each node is identified on the map by a number.

10 Water to which plan applies

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

- (a) water in a watercourse, lake or spring (*surface water*);
- (b) water collected in a weir or dam constructed across a watercourse, lake or spring (also *surface water*);
- (c) subartesian water.

Part 3 Outcomes for sustainable management of water

Division 1 Outcomes for plan area

11 General outcomes

(1) Surface water is to be allocated and managed in a way that seeks to achieve a balance in the following outcomes—

¹ The boundary locations in digital electronic form may be inspected at the department's offices at 167 Walsh Street, Mareeba, 5B Sheridan Street, Cairns and 83 Mabel Street, Atherton.

- (a) to ensure a reliable and secure supply of water from the plan area during the time this plan is in force;
- (b) to protect the probability of being able to obtain water under a water allocation;
- (c) to allow water to be used for hydro-electric power generation.
- (2) Both surface water and subartesian water are to be allocated and managed in a way that seeks to achieve a balance in the following outcomes—
 - (a) to allow water to be used for the following—
 - (i) agriculture;
 - (ii) aquaculture;
 - (iii) industrial needs;
 - (iv) small scale uses;
 - (v) stock and domestic purposes;
 - (vi) tourism and recreational uses;
 - (vii) urban needs;
 - (b) to provide for the continued use of all water entitlements and other authorisations to take or interfere with water;
 - (c) to encourage the efficient use of water;
 - (d) to maintain areas of significant tourism and recreational value, including the Barron Falls, Barron Gorge and Tinaroo Falls Dam;
 - (e) to allow cultural use by Aboriginal or Torres Strait Islander communities;
 - (f) to provide water to support natural ecosystems.

12 General ecological outcomes

(1) Surface water is to be allocated and managed in a way that seeks to achieve a balance in the following outcomes while recognising the natural state of watercourses, lakes and springs has changed because of water infrastructure, flow supplementation and the taking of water—

- (a) to maintain habitats of native plants and animals in watercourses, lakes and springs;
- (b) to maintain riparian systems and their functions influencing the riverine ecosystems;
- (c) to maintain and favour native plants and animals associated with watercourses, lakes and springs and riparian zones;
- (d) to provide wet season flow to benefit native plants and animals in estuaries;
- (e) to maintain long term water quality suitable for riverine and estuarine ecosystems;
- (f) to maintain existing geomorphic features and processes;
- (g) to maintain the capability of one part of the river system to be connected to another through the flow of water—
 - (i) throughout the watercourse network; and
 - (ii) within the riparian zone, floodplain and watercourses, lakes and springs;
- (h) to maintain ecosystem food chains, their balance and the movement of carbon energy.
- (2) Subartesian water is to be allocated and managed to maintain subartesian water contributions to the flow of water in watercourses, lakes and springs and to groundwater dependent ecosystems.

Division 2 Ecological outcomes for particular parts of the plan area

13 Application of div 2

Without limiting section 12, the ecological outcomes mentioned in this division apply to the parts of the plan area mentioned.

14 Barron River catchment

Water in the Barron River catchment is to be allocated and

managed to provide a flow regime-

- (a) to maintain delivery of freshwater, sediment, nutrients and organic matter to the river's estuary; and
- (b) to maintain the brackish water habitat in the estuary.

15 Flaggy Creek

Water in Flaggy Creek is to be allocated and managed to protect areas and species of significant conservation value associated with the creek.

Part 4 Performance indicators and objectives

Division 1 Preliminary

16 Application of pt 4

This part applies only to surface water.

Division 2 Environmental flow objectives

17 Performance indicators for environmental flow objectives

The performance indicators for the environmental flow objectives are—

- (a) for assessing periods of low flow—
 - (i) 50% daily flow; and
 - (ii) 90% daily flow; and
 - (iii) daily flow less than 1ML; and
 - (iv) number of periods of no flow of at least 1 month but less than 3 months; and

- (v) number of periods of no flow of at least 3 months; and
- (b) for assessing periods of medium to high flow—
 - (i) mean annual flow; and
 - (ii) 1.5 year daily flow volume; and
 - (iii) 5 year daily flow volume; and
 - (iv) 10 year daily flow volume; and
 - (v) 20 year daily flow volume; and
- (c) for assessing seasonal flow patterns—
 - (i) flow regime class; and
 - (ii) annual proportional flow deviation.

18 Environmental flow objectives

The environmental flow objectives for this plan are stated in schedule 5.

Division 3 Water allocation security objectives

19 Performance indicators for water allocation security objectives

The performance indicators for the water allocation security objectives are—

- (a) for taking supplemented water—
 - (i) annual supplemented water sharing index; and
 - (ii) monthly supplemented water sharing index; and
- (b) for taking unsupplemented water—
 - (i) for water allocations in the class CA water allocation group—95% unsupplemented water sharing index; and
 - (ii) for water allocations in the class CB and CC water allocation groups—

- (A) 50% unsupplemented water sharing index; and
- (B) 70% unsupplemented water sharing index; and
- (C) 80% unsupplemented water sharing index; and
- (D) annual volume probability.

20 Water allocation security objectives

The water allocation security objectives for this plan are stated in—

- (a) for water allocations to take supplemented water—schedule 6, part 1; and
- (b) for water allocations to take unsupplemented water—schedule 6, part 2.

Part 5 Strategies for achieving outcomes (surface water)

Division 1 Preliminary

21 Application of pt 5

This part applies only to surface water.

22 Decisions consistent with objectives

Decisions about the allocation or management of water in the plan area, other than a decision in relation to a water permit, must be consistent with—

(a) the environmental flow objectives stated in schedule 5; and

(b) the water allocation security objectives stated in schedule 6.

23 Assessing impact of decisions

- (1) The IQQM computer program's simulation for the simulation period is used to assess consistency with the objectives.
- (2) If it is not practicable to use the IQQM computer program, another assessment method approved by the chief executive may be used.
- (3) The chief executive may approve an assessment method for subsection (2) only if the chief executive is satisfied the method will assess consistency with the objectives at least as accurately as the IQQM computer program.

24 Taking or interfering with water from waterholes or lakes

- (1) This section applies to the chief executive in making a decision about—
 - (a) a licence for taking unsupplemented water; or
 - (b) converting an authorisation for taking unsupplemented water into a water allocation; or
 - (c) the management of water under a resource operations licence.
- (2) If the licence, water allocation or resource operations licence allows taking or interfering with water from a waterhole or lake, the chief executive must—
 - (a) consider the impact the taking may have on the cultural or ecological values of the waterhole or lake; and
 - (b) impose a condition on the licence, water allocation or resource operation licence about maintaining the cultural or ecological values of the waterhole or lake.

Example for paragraph (b)—

A condition that the water may be taken only if the water level in the waterhole or lake is above the level that is 0.5m below the level at which it naturally overflows.

- (3) However, the chief executive need not impose a condition mentioned in subsection (2)(b) if the chief executive is satisfied—
 - (a) the taking of water from the waterhole or lake will not adversely affect its cultural or ecological values; or
 - (b) for a licence or water allocation that replaces an authorisation in force immediately before the commencement of this plan—the holder of the authorisation would suffer economic hardship if the condition were imposed.

Division 2 Dealing with unallocated water under a resource operations plan

25 Matters chief executive must consider

- (1) In preparing and implementing a process for dealing with unallocated water under a resource operations plan, the chief executive must consider—
 - (a) the efficiency of existing and proposed water use practices; 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 or Torres Strait Islander communities; and
 - (d) whether the proposed taking or interfering is likely to have a direct adverse effect on groundwater flows.

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

Division 3 Resource operations licences

26 Water allocations to be managed under a resource operations licence

Water allocations converted from the following authorisations are to be managed under the resource operations licence for the Mareeba–Dimbulah Water Supply Scheme—

- (a) an interim water allocation for the Mareeba–Dimbulah Water Supply Scheme;
- (b) other authorisations for the taking of water supplied by the Mareeba–Dimbulah Water Supply Scheme.

27 Matters chief executive must consider

- (1) In deciding the operating arrangements and supply requirements for water infrastructure and proposed infrastructure, the chief executive must consider—
 - (a) the impact of the infrastructure's operation on the following—
 - (i) water quality;
 - (ii) instream water levels;
 - (iii) erosion of the bed and banks of watercourses;
 - (iv) riparian vegetation;
 - (v) the extent to which artificial variations in instream water levels and flows may adversely affect natural ecosystems;
 - (vi) recreation and aesthetic values;
 - (vii) cultural values, including, for example, cultural values of local Aboriginal or Torres Strait Islander communities; and

- (b) the impact of the infrastructure or proposed infrastructure on the movement of fish and other aquatic species; and
- (c) the impact of the transfer of water between watercourses; and
- (d) the likelihood of fish deaths caused by the operation of the infrastructure.
- (2) Subsection (1) does not limit the matters the chief executive may consider.

Division 5 Converting authorisations to water allocations

Subdivision 1 General provisions

30 Definition for div 5

In this division—

authorisation means an authorisation or authority mentioned in section 31.

31 Application of div 5

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.

32 Location for taking water

The location for taking water stated on a water allocation must include the place at which water could have been taken under the authorisation.

33 Purpose to be stated on water allocation

The purpose stated on a water allocation must be-

- (a) if the purpose stated on the authorisation is stock, domestic, irrigation, stock intensive, agriculture, dairy, water harvesting, aquaculture or a similar purpose—'rural'; or
- (b) if the purpose stated on the authorisation is distribution loss—'distribution loss'; or
- (c) otherwise—'any'.

Subdivision 2 Supplemented water

34 Volume of supplemented water

A water allocation to take supplemented water must state a nominal volume.

35 Nominal volume for supplemented water

The nominal volume for a water allocation for an authorisation that states an annual volume of water is—

- (a) if the authorisation is for a distribution loss—the volume decided by the chief executive having regard to—
 - (i) the stated volume; and
 - (ii) the annual volumes of water estimated by the chief executive to have been taken under the authorisation during the period, of not more than 10 years, immediately before the commencement of this plan; and
 - (iii) the efficiency of the use of the water mentioned in subparagraph (ii); and
- (b) otherwise—the stated volume.

36 Priority groups for supplemented water allocations

In the Mareeba–Dimbulah Water Supply Scheme, a water allocation to take supplemented water belongs to—

- (a) for an authorisation identified by an interim resource operations licence as high priority—the high priority group; and
- (b) for other authorisations—the medium priority group.

Subdivision 3 Unsupplemented water

37 Elements of water allocation to take unsupplemented water

- (1) A water allocation to take unsupplemented water must state the following—
 - (a) the location from which water may be taken under the allocation;
 - (b) the purpose for which water may be taken under the allocation;
 - (c) the nominal volume for the allocation;
 - (d) the annual volumetric limit for the allocation;
 - (e) for a water allocation to take unsupplemented water in subcatchment area C—the seasonal volumetric limit for the allocation;
 - (f) the daily volumetric limit for the allocation;
 - (g) the maximum rate at which water may be taken under the allocation;
 - (h) the flow conditions under which water may be taken;
 - (i) the water allocation group to which the allocation belongs.
- (2) A water allocation to take unsupplemented water may also state the monthly volumetric limit for the allocation.

38 Nominal volume for unsupplemented water

In deciding the nominal volume for a water allocation in a water allocation group mentioned in schedule 7, column 1, the chief executive—

- (a) must have regard to—
 - (i) the local availability of water; and
 - (ii) the conditions under which the water may be taken under the authorisation; and
 - (iii) the annual volumes of water estimated by the chief executive to have been taken under the authorisation during the period, of not more than 10 years, immediately before the commencement of this plan; and
 - (iv) the simulated mean annual diversion; and
 - (v) the efficiency of the use of the water mentioned in subparagraph (iii); and
- (b) must ensure the total of the nominal volumes for the water allocation group is not more than the volume stated in schedule 7, column 2, for the group.

39 Annual volumetric limit

The annual volumetric limit for a water allocation to take unsupplemented water is—

- (a) for an authorisation that states an annual volume of water—the stated volume; and
- (b) for an authorisation that states the area that may be irrigated—the volume, expressed in megalitres, calculated by multiplying the area, in hectares, by 10; and
- (c) for another authorisation—the volume decided by the chief executive having regard to—
 - (i) the conditions under which water may be taken under the authorisation; and
 - (ii) the water taking capacity of any existing works for taking water under the authorisation; and

- (iii) the annual volumes of water estimated by the chief executive to have been taken under the authorisation during the period, of not more than 10 years, immediately before the commencement of this plan; and
- (iv) the efficiency of the use of the water mentioned in subparagraph (iii).

39A Seasonal volumetric limit

The seasonal volumetric limit for a water allocation to take unsupplemented water in subcatchment area C is—

- (a) for an authorisation to which section 39(a) or (c) applies—the annual volumetric limit for the authorisation; or
- (b) for an authorisation to which section 39(b) applies—0.66 multiplied by the annual volumetric limit for the authorisation.

40 Monthly volumetric limits

In deciding monthly volumetric limits for a water allocation to take unsupplemented water, the chief executive must have regard to—

- (a) the local availability of water in each month; and
- (b) the conditions under which the water may be taken under the authorisation; and
- (c) the volumes of water estimated by the chief executive to have been taken under the authorisation during the period, of not more than 10 years, immediately before the commencement of this plan; and
- (d) the simulated mean annual diversion; and
- (e) the efficiency of the use of the water mentioned in paragraph (c).

40A Daily volumetric limit

- (1) The daily volumetric limit for a water allocation to take unsupplemented water is—
 - (a) for an authorisation that states the volume of water that may be taken in a day—the stated volume; and
 - (b) for an authorisation that does not state a volume that may be taken in a day but for which a related development permit—
 - (i) states a pump size mentioned in schedule 8, column 1—the daily volumetric limit stated in schedule 8, column 3 for the pump size; or
 - (ii) states a pump size other than a pump size mentioned in schedule 8, column 1—the daily volumetric limit decided by the chief executive having regard to the daily volumetric limits stated for similar pump sizes in schedule 8, column 3; and
 - (c) for another authorisation—the daily volumetric limit decided by the chief executive having regard to—
 - (i) the type of authorisation; and
 - (ii) an estimate or measurement of the rate at which water can be taken under the authorisation.
- (2) However, for subsection (1)(b), if the authorisation holder satisfies the chief executive that the water taking capacity of the pump is different from the daily volumetric limit decided under the subsection, the daily volumetric limit is the volume decided by the chief executive having regard to the following—
 - (a) the conditions under which the water may be taken under the authorisation;
 - (b) the water taking capacity of the pump to which the development permit relates (the *existing pump*) under normal operating conditions;
 - (c) the irrigation or water distribution system related to the existing pump during the period of not more than 10 years immediately before the commencement of this section;

- (d) the efficiency of the water use associated with the irrigation or water distribution system mentioned in paragraph (c).
- (3) The chief executive must ensure the daily volumetric limit for a water allocation is not more than the total volume that could be taken in a day at the maximum rate decided for the allocation under section 41.

41 Maximum rates for taking unsupplemented water

The maximum rate at which unsupplemented water may be taken under an allocation is—

- (a) for an authorisation that states a maximum rate—the stated rate; and
- (b) for an authorisation that does not state a maximum rate but for which a related development permit states a pump size mentioned in schedule 8, column 1—
 - (i) if the authorisation holder demonstrates that the actual rate at which water can be taken is different from the rate stated in schedule 8, column 2, for the pump size—the rate decided by the chief executive having regard to—
 - (A) the conditions under which the water may be taken; and
 - (B) the water taking capacity of the pump to which the development permit relates (the *existing pump*) under normal operating conditions; and
 - (C) the irrigation or water distribution system related to the existing pump during the period of not more than 10 years immediately before the commencement of this plan; and
 - (D) the efficiency of the water use mentioned in subsubparagraph (C); or
 - (ii) otherwise—the rate stated in schedule 8, column 2, for the pump size; and

- (c) for an authorisation that does not state a maximum rate but for which a related development permit states a pump size other than a pump size mentioned in schedule 8, column 1—the rate decided by the chief executive having regard to the matters mentioned in paragraph (b)(i)(A) to (D); and
- for another authorisation-the rate decided by the chief (d) executive having regard to-
 - (i) the nature of the authorisation; and
 - (ii) an estimate or measurement of the rate at which water is taken under the authorisation.

42 Conditions for unsupplemented water allocations

In deciding the conditions under which water may be taken under a water allocation to take unsupplemented water, the chief executive must have regard to the conditions stated on the relevant authorisation.

43 Water allocation groups

A water allocation to take unsupplemented water in subcatchment area C belongs to-

- authorisation for (a) for an town water supply purposes-the class CA water allocation group; and
- (b) for an authorisation that states a purpose or similar purpose mentioned in section 33(a), other than water harvesting, or a purpose mentioned in section 33(c)—the class CB water allocation group; and
- for other authorisations-the class CC water allocation (c) group.

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Division 6 Licences for taking unsupplemented water

44 Elements of water licence

- (1) A water licence to take unsupplemented water must state each of the following—
 - (a) the location from which water may be taken under the licence;
 - (b) the purpose for which water may be taken under the licence;
 - (c) the nominal entitlement for the licence;
 - (d) for a water licence to take water in subcatchment area C or H—the seasonal volumetric limit for the licence;
 - (e) the daily volumetric limit for the licence;
 - (f) the maximum rate at which water may be taken under the licence;
 - (g) if a condition applies to the licence, including, for example, a flow condition under which water may be taken or a condition about storing water taken under the licence—the condition.
- (2) A water licence to take unsupplemented water may also state the monthly volumetric limit for the licence.

44A Purpose to be stated on water licence

- (1) The purpose to be stated on a water licence to take unsupplemented water that replaces an existing licence must be—
 - (a) if the purpose stated on the existing licence is stock or domestic—'stock and domestic'; or
 - (b) if the purpose stated on the existing licence is irrigation, stock intensive, agriculture, dairy, water harvesting, aquaculture or a similar purpose—'rural'; or
 - (c) otherwise—'any'.
- (2) In this section—

existing licence means a water licence to take unsupplemented water in force immediately before the commencement of this section.

45 Nominal entitlement

- (1) Subsection (2) states the nominal entitlement for a water licence to take unsupplemented water.
- (2) The nominal entitlement is—
 - (a) for a licence that states a volume of water that may be taken—the stated volume; and
 - (b) for a licence that states the area that may be irrigated—the volume decided by the chief executive having regard to the volume of water required to efficiently irrigate the area, but not more than the volume, expressed in megalitres, calculated by multiplying the area, in hectares, by—
 - (i) for subcatchment area B—3; and
 - (ii) for subcatchment area C or H-10; and
 - (iii) for other subcatchment areas—6.6; and
 - (c) for another licence—the volume decided by the chief executive having regard to—
 - (i) the conditions under which water may be taken under the licence; and
 - (ii) the water taking capacity of any existing works for taking water under the licence; and
 - (iii) the annual volumes of water estimated by the chief executive to have been taken under the licence during the period, of not more than 10 years, immediately before the commencement; and
 - (iv) the efficiency of the use of the water mentioned in subparagraph (iii).

45A Seasonal volumetric limit

The seasonal volumetric limit for a water licence to take unsupplemented water in subcatchment area C or H is—

- (a) if section 45(2)(a) or (c) applies to the licence—the nominal entitlement for the licence; or
- (b) if section 45(2)(b) applies to the licence-0.66 multiplied by the nominal entitlement for the licence.

45B Monthly volumetric limit

In deciding monthly volumetric limits for a water licence to take unsupplemented water, the chief executive must have regard to—

- (a) the local availability of water in each month; and
- (b) the conditions under which water may be taken under the licence; and
- (c) the volumes of water estimated by the chief executive to have been taken under the licence during the period of not more than 10 years immediately before the commencement of this section; and
- (d) the simulated mean annual diversion for the licence; and
- (e) the efficiency of the use of the water mentioned in paragraph (c).

45C Daily volumetric limit

- (1) The daily volumetric limit for a water licence to take unsupplemented water is—
 - (a) for a licence that states the volume of water that may be taken in a day—the stated volume; and
 - (b) for a licence that does not state a volume that may be taken in a day but for which a related development permit—
 - (i) states a pump size mentioned in schedule 8, column 1—the daily volumetric limit stated in schedule 8, column 3 for the pump size; or
 - (ii) states a pump size other than a pump size mentioned in schedule 8, column 1—the daily volumetric limit decided by the chief executive having regard to the daily volumetric limits stated

for similar pump sizes in schedule 8, column 3; and

- (c) for another licence—the daily volumetric limit decided by the chief executive having regard to—
 - (i) the type of licence; and
 - (ii) the rate or estimated rate at which water can be taken under the licence.
- (2) However, for subsection (1)(b), if the licence holder satisfies the chief executive that the water taking capacity of the pump is different from the daily volumetric limit decided under the subsection, the daily volumetric limit is the volume decided by the chief executive having regard to the following—
 - (a) the conditions under which water may be taken under the licence;
 - (b) the water taking capacity of the pump to which the development permit relates (the *existing pump*) under normal operating conditions;
 - (c) the irrigation or water distribution system related to the existing pump during the period of not more than 10 years immediately before the commencement of this section;
 - (d) the efficiency of the water use associated with the irrigation or water distribution system mentioned in paragraph (c).
- (3) The chief executive must ensure the daily volumetric limit for a water licence is not more than the total volume that could be taken in a day at the maximum rate decided for the licence under section 46.

46 Maximum rates for taking unsupplemented water

The maximum rate at which unsupplemented water may be taken under a licence in force on the commencement of this plan is—

(a) for a licence that states a maximum rate—the stated rate; and

- (b) for a licence that does not state a maximum rate but for which a related development permit states a pump size mentioned in schedule 8, column 1—
 - (i) if the licence holder demonstrates that the actual rate at which water can be taken is different from the rate stated in schedule 8, column 2, for the pump size—the rate decided by the chief executive having regard to—
 - (A) the water taking capacity of the pump to which the development permit relates (the *existing pump*) under normal operating conditions; and
 - (B) the irrigation or water distribution system related to the existing pump during the period of not more than 10 years immediately before the commencement; and
 - (C) the efficiency of the water use mentioned in subsubparagraph (B); and
 - (D) the conditions under which the water may be taken; or
 - (ii) otherwise—the rate stated in schedule 8, column 2, for the pump size; and
- (c) for a licence that does not state a maximum rate but for which a related development permit states a pump size other than a pump size mentioned in schedule 8, column 1—the rate decided by the chief executive having regard to the matters mentioned in paragraph (b)(i)(A) to (D); and
- (d) for another licence—the rate decided by the chief executive having regard to—
 - (i) the nature of the licence; and
 - (ii) an estimate or measurement of the actual rate at which water is taken under the licence.

Division 7 Moratorium notice

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

- (1) This section continues, in part, the effect of the moratorium notice, published on 20 September 2000 and amended on 8 April 2002.
- (2) This section applies to an application under the Act or the repealed Act if granting the application would have 1 or more of the following effects on water to which this plan relates—
 - (a) increase the amount of water taken or interfered with;
 - (b) change the location from which the water may be taken or interfered with;
 - (c) increase the maximum rate for taking or interfering with the water;
 - (d) change the conditions under which the water may be taken;
 - (e) change the purpose for which water may be taken.
- (3) The application will be accepted but not dealt with until the resource operations plan deals with the allocation of unallocated water in the area to which the application relates.
- (4) However, subsection (3) does not apply to an application—
 - (a) for a water permit; or
 - (b) by an interim resource operations licence holder to transfer an interim water allocation; or
 - (c) to transfer an authority to take water in the Mareeba–Dimbulah Water Supply Scheme; or
 - (d) to reinstate or replace an expired licence.
- (5) The chief executive's acceptance of an application does not give the applicant priority in having the application decided.

Part 6 Strategies for achieving outcomes (subartesian water)

Division 1 General provisions

48 Application of pt 6

This part applies only to subartesian water.

49 Elements of water licence

A water licence to take subartesian water must state—

- (a) the purpose for which water may be taken under the licence; and
- (b) the nominal entitlement for the licence.

49A Purpose to be stated on water licence

- (1) The purpose to be stated on a water licence to take subartesian water that replaces an existing licence must be—
 - (a) if the purpose stated on the existing licence is irrigation, stock intensive, agriculture, dairy, water harvesting, aquaculture or a similar purpose—'rural'; or
 - (b) otherwise—'any'.
- (2) The purpose to be stated on a water licence to take subartesian water, other than a water licence mentioned in subsection (1), must be—
 - (a) 'rural'; or
 - (b) 'any'.
- (3) In this section—

existing licence means a water licence to take subartesian water in force immediately before the commencement of this section.

50 Limitation on taking water—Act, s 20(6)

A person may not take subartesian water in the Atherton Subartesian Area or the Cairns Northern Beaches Subartesian Area other than—

- (a) for stock or domestic purposes; or
- (b) under a water licence or water permit.

51 Relationship with Integrated Planning Act 1997

- The following works for taking subartesian water in the Atherton Subartesian Area or the Cairns Northern Beaches Subartesian Area are self-assessable development for the *Integrated Planning Act 1997*, schedule 8, part 2, table 4, item (1)(b)(iii)—
 - (a) works for taking subartesian water for stock or domestic purposes;
 - (b) works that are a monitoring bore.
- (2) Works, other than the works mentioned in subsection (1), for taking or interfering with subartesian water in the Atherton Subartesian Area or the Cairns Northern Beaches Subartesian Area are assessable development for the *Integrated Planning Act 1997*, schedule 8, part 1, table 4, item 3(c)(ii).
- (3) In this section—

monitoring bore means a water bore used for monitoring the levels and quality of water in an aquifer.

Division 2 Strategies for Atherton Subartesian Area only

Subdivision 1 Applications for or about water licences

52 Applications for subartesian management area A

(1) This section applies if an application for or about a water licence to take subartesian water in subartesian management area A would increase the volume of subartesian water taken in the area.

- (2) The chief executive may grant the application only if—
 - (a) the nominal entitlement for the licence does not result in the total nominal entitlements for licences in the area being more than 14500ML; and
 - (b) the resource operations plan includes a process for granting the water.
- (3) This section is subject to section 54.

53 Applications for subartesian management area B

- (1) This section applies if an application for or about a water licence to take subartesian water in subartesian management area B would increase the volume of subartesian water taken in the area.
- (2) The chief executive must refuse the application.
- (3) This section is subject to section 54.

54 Exceptions for particular applications

Sections 52 and 53 do not apply to an application to—

- (a) reinstate, under section 221 of the Act, an expired water licence; or
- (b) amalgamate, under section 224 of the Act, 2 or more water licences in force immediately before the commencement of this section; or
- (c) replace, under section 225 of the Act, an original licence if the original licence is to be replaced with 2 or more water licences; or
- (d) replace, under section 229 of the Act, an expired licence with 1 or more licences.

Subdivision 2 Continued authorisations for part of subartesian management area B

55 Definition for sdiv 2

In this subdivision—

existing works means works in existence on 19 December 2002 that the chief executive is satisfied were used, or capable of being used, on that day to take subartesian water other than for stock or domestic purposes.

56 Taking water using existing works authorised

- (1) This section applies to an owner of land in subartesian management area B on which there are existing works for taking subartesian water in the relevant area.
- (2) The owner may continue to take subartesian water using the works for 1 year after the commencement of this section.
- (3) Also, if the owner gives the chief executive notice in the approved form of the taking of subartesian water using the works, the owner may continue to take subartesian water using the works—
 - (a) after the notice is given; and
 - (b) until the owner is granted a water licence under section 57.
- (4) Subsections (2) and (3) do not authorise the owner to take more than the annual volume of subartesian water the owner was taking using the works before 20 December 2002.
- (5) In this section—

relevant area means the part of subartesian management area B from which water could lawfully be taken before 20 December 2002 other than under a water licence.

57 Granting water licences

(1) This section applies if, under section 56(3), an owner of land gives the chief executive notice of the taking of subartesian water.

- (2) After the chief executive receives the notice, the chief executive must, under section 212 of the Act, grant a water licence to the owner to continue to take subartesian water using the existing works.
- (3) In deciding the nominal entitlement for the licence, the chief executive must have regard to
 - the capacity of the works for taking subartesian water; (a) and
 - the annual volumes of subartesian water estimated by (b) the chief executive to have been taken during the period of not more than 10 years immediately before 20 December 2002; and
 - the efficiency of the use of the water mentioned in (c) paragraph (b); and
 - the availability of other water sources; and (d)
 - (e) the availability of water in the aquifer to which the authorisation relates.

57A Restriction on nominal entitlement

In deciding the nominal entitlement for a water licence mentioned in section 57(2), the chief executive must not decide a volume that is more than—

- for a licence to take subartesian water for irrigation (a) purposes—5ML for each hectare of crop to be irrigated; or
- for a licence to take subartesian water for another (b) purpose-the volume of water estimated by the chief executive to be needed for the purpose.

Division 3 Strategies for Cairns Northern Beaches Subartesian Area only

57B Decisions about taking subartesian water

This section applies to an application for or about a water (1)licence to take subartesian water in the Cairns Northern Beaches Subartesian Area, if granting the application would increase the volume of subartesian water taken.

- (2) In deciding the application, the chief executive must have regard to—
 - (a) the availability of an alternative water supply for the purpose for which the water is required; and
 - (b) the efficiency of existing and proposed water use practices; and
 - (c) whether the proposed taking is likely to have a direct adverse effect on surface water flows; and
 - (d) the cumulative impact of taking subartesian water on surface water flows and subartesian water flows.
- (3) Subsection (2) does not limit the matters the chief executive may consider.
- (4) This section does not apply to an application to—
 - (a) reinstate, under section 221 of the Act, an expired water licence; or
 - (b) amalgamate, under section 224 of the Act, 2 or more water licences in force immediately before the commencement of this section; or
 - (c) replace, under section 225 of the Act, an original licence if the original licence is to be replaced with 2 or more water licences; or
 - (d) replace, under section 229 of the Act, an expired licence with 1 or more licences.

57C Restriction on nominal entitlement

In deciding the nominal entitlement for a water licence to take subartesian water in the Cairns Northern Beaches Subartesian Area, the chief executive must not decide a volume that is more than—

(a) for a licence to take water for irrigation purposes—1.75ML for each hectare of crop to be irrigated; or (b) for a licence to take water for another purpose—the volume estimated by the chief executive to be required for the purpose.

Part 7 Monitoring and reporting requirements

58 Monitoring

- (1) The monitoring requirements for the plan are—
 - (a) water monitoring for—
 - (i) stream flows; and
 - (ii) taking and diverting water; and
 - (iii) releases from water storages; and
 - (iv) water quantity for water storages including inflow, storage volume or water level and outflow; and
 - (v) subartesian water levels; and
 - (b) natural ecosystems monitoring for—
 - (i) volume, frequency, duration and timing of stream flows; and
 - (ii) information on hydraulic habitat requirements of ecological assets in the plan area; and
 - (c) other water and natural ecosystem monitoring required by the chief executive.
- (2) The monitoring requirements are to be achieved by—
 - (a) monitoring programs undertaken by holders of resource operations licences; and
 - (b) monitoring programs administered by the chief executive and relevant State agencies; and
 - (c) other monitoring programs considered by the chief executive to be relevant to the matters mentioned in subsection (1).

(3) In this section—

ecological assets include a species, a group of species, a biological function, an ecosystem and a place of natural value.

hydraulic habitat requirements, of an ecological asset, are the hydraulic or physical attributes of the flow regime that are—

- (a) required for a particular biological process or response to happen in relation to the asset; or
- (b) necessary to maintain the long-term biological integrity of the asset.

59 Monitoring programs undertaken by holders of a resource operations licence

- The monitoring programs mentioned in subsections (2) and
 must assist in enabling the chief executive to assess the effectiveness of the strategies under parts 5 and 6.
- (2) Each resource operations licence holder must develop and undertake monitoring programs, satisfactory to the chief executive, that include monitoring the matters mentioned in section 58(1) in the water supply scheme in which the holder manages water.
- (3) For subsection (2), the programs must include monitoring—
 - (a) water quantity including—
 - (i) the flow of water at gauging stations; and
 - (ii) the supply and taking of water; and
 - (iii) inflows of water to the dams and weirs mentioned in the holder's resource operations licence; and
 - (iv) the quantity of water released from the dams and weirs; and
 - (v) the level of water in the dams and weirs; and
 - (b) water quality including chemical, physical and biological measurements; and
 - (c) the operation of outlet works relating to the dams and weirs including, for example, multi-level offtakes; and

- (d) the operation of fish ways; and
- (e) the operation of devices to minimise the impact on natural ecosystems of the transfer of water between watercourses.

60 Resource operations licence holders to give reports

- (1) Each resource operations licence holder must give the chief executive a written report containing the following information—
 - (a) details of the information obtained by monitoring the matters mentioned in section 59;
 - (b) details of decisions made by the holder in managing water and water infrastructure, including, for example, decisions about the following—
 - (i) making water available to water users under the holder'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 holder with the resource operations plan;
 - (d) details about remedial action taken by the holder—
 - (i) in relation to a requirement under the resource operations plan; or
 - (ii) in response to an event or thing affecting water quality;
 - (e) details of any emergency action taken by the holder that may affect the achievement of the outcomes under part 3.
- (2) A report about a matter mentioned in subsection (1) must be given—
 - (a) for each water year for the resource operations plan in which the holder manages water under this plan; and

- (b) within 3 months after the end of the water year to which the report relates.
- (3) A report about a matter mentioned in subsection (1)(e) must also be given the next business day after the action is taken.

Part 8 Implementing the plan

61 Priorities for converting to, or granting, water allocations

Each area described in schedule 9 is a priority area for this plan for the conversion to or granting of water allocations to take water in the plan area.

62 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 authorisations in a priority area to water allocations; and
 - (b) to deal with unallocated surface water available for future water requirements in the plan area; and
 - (c) for water in a priority area—to make environmental management rules, water sharing rules, water allocation change rules and seasonal water assignment rules; and
 - (d) to implement the monitoring requirements in part 7.
- (3) Within 3 years after the commencement, it is proposed to prepare a new resource operations plan or amend the plan mentioned in subsection (2) to amend licences to take surface water to be consistent with this plan.

(4) Subsections (2) and (3) do not limit the matters that may be included in the resource operations plan.

Part 9 Minister's report and amending plan

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

- (1) The Minister's report² on this plan must be prepared—
 - (a) for the first report—after the commencement of the resource operations plan; and
 - (b) for subsequent reports—for each financial year this plan is in force; and
 - (c) within 6 months after the end of the financial year to which the report relates.
- (2) If the Minister is satisfied about any of the matters mentioned in section 65, the report, in its assessment of the effectiveness of the implementation of the plan in achieving the plan's outcomes, must include a consideration of the matters.

64 Minor amendment 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 or addition of an environmental flow objective if the amendment or addition achieves an equivalent or improved ecological outcome without adversely affecting the water allocation security objectives or the outcomes under part 3;
- (b) an amendment or addition of a water allocation security objective if the amendment or addition does not adversely affect existing water allocations,

² See section 54 (Matters the reports must include) of the Act.

environmental flow objectives or the outcomes under part 3;

- (c) an amendment or addition of a priority area;
- (d) an amendment or addition of a node;
- (e) an amendment or addition of a priority group;
- (f) an amendment or addition of a water allocation group;
- (g) an amendment to subdivide a subcatchment area;
- (h) an amendment to subdivide a volume stated in schedule 7;
- (i) an amendment or addition of a monitoring or reporting requirement under part 7;
- (j) an amendment to section 47 if notice of the amendment is published as if it were a moratorium notice under section 26 of the Act.

65 Amending or replacing plan

The Minister must consider amending this plan or preparing a new plan to replace this plan if the Minister is satisfied—

- (a) in relation to general outcomes—
 - (i) water entitlements in the plan area are not sufficient to meet water needs sourced from the plan area having regard to—
 - (A) the extent to which water is being taken under the water entitlements; and
 - (B) the efficiency of present, and expected future, water use; and
 - (C) emerging requirements for additional water; and
 - (D) alternative water sources including, for example, recycled water and water savings from improvements in the efficiency of water use; and
 - (E) the likely timeframe in which additional water will be required; and

- (ii) there are economically viable and ecologically sustainable uses for additional water; or
- (b) the plan's ecological outcomes are not being achieved.

Part 10 Transitional provision for Water Resource (Barron) Amendment Plan (No. 1) 2009

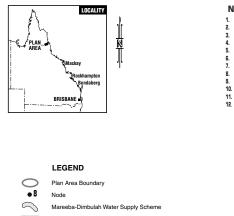
66 Appeals against particular decisions

- (1) Subsection (2) applies if—
 - (a) before the commencement, an interested person has appealed under chapter 6 of the Act against a review decision to grant in part an application for or about a water licence that had the effect of increasing the volume of water taken in subartesian management area B; and
 - (b) the appeal has not been decided before the commencement.
- (2) For deciding the appeal, part 6 as in force immediately before the commencement continues to apply.
- (3) In this section—

commencement means the day this section commences.

Schedule 1 Plan area

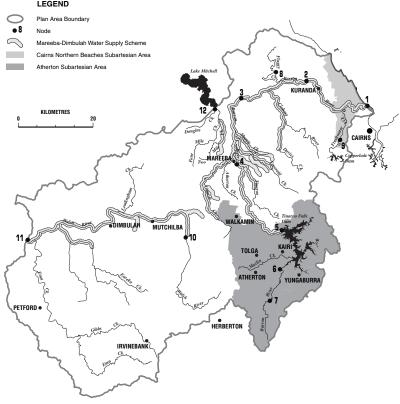
sections 4 and 9



Nodes:

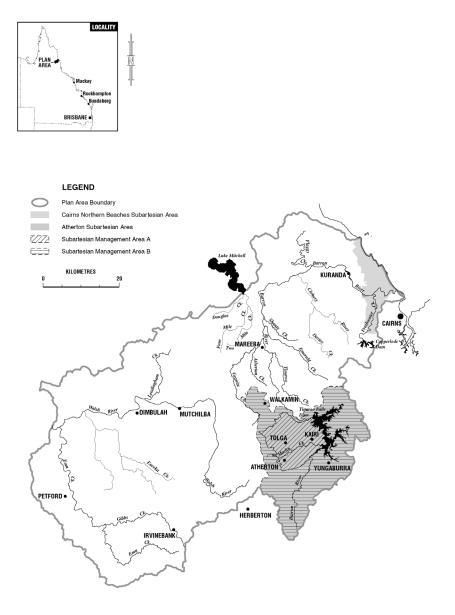
- Barron River at River Mouth (AMTD 0.0 km)

- Barron River at Myola (AMTD 27.1 km) Barron River at Bilwon (AMTD 29.3 km) Barron River at Mareeba (AMTD 70.2 km) Barron River at Tinaroo Falls (AMTD 101.1 km)
- Barron River at Picnic Crossing (AMTD 127.0 km) Barron River at Goonara (AMTD 146.0 km)
- Flaggy Creek at Recorder (AMTD 13.0 km)
- Freshwater Creek at Freshwater (AMTD 23.1 km) Walsh River at Nullinga (AMTD 259.7 km)
- Walsh River at Flatrock (AMTD 197.9 km)
- Mitchell River at end of MDIA (AMTD 601.2 km)



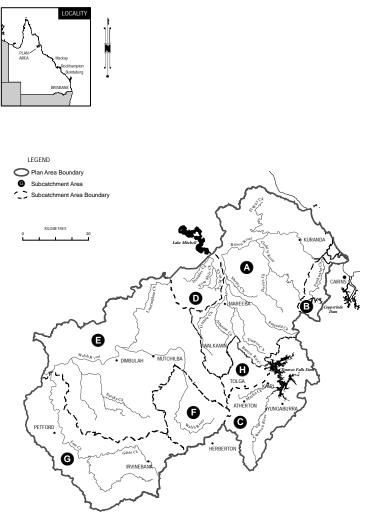
Schedule 2 Subartesian areas

sections 5 and 6



Schedule 3 Subcatchment areas

section 7



Schedule 4 Nodes

section 9

Node	Location
1	Barron River at river mouth (AMTD 0.0km)
2	Barron River at Myola (AMTD 27.1km)
3	Barron River at Bilwon (AMTD 49.3km)
4	Barron River at Mareeba (AMTD 70.2km)
5	Barron River at Tinaroo Falls (AMTD 101.1km)
6	Barron River at Picnic Crossing (AMTD 127.0km)
7	Barron River at Goonara (AMTD 146.0km)
8	Flaggy Creek at recorder (AMTD 13.0km)
9	Freshwater Creek at Freshwater (AMTD 23.1km)
10	Walsh River at Nullinga (AMTD 259.7km)
11	Walsh River at Flatrock (AMTD 197.9km)
12	Mitchell River downstream of Biboohra (AMTD 601.2km)

Schedule 5 Environmental flow objectives

section 18

Part 1 Low flow objectives

- 1 At each node mentioned in table 1, column 1, minimise the extent to which the 50% daily flow stated in columns 2 to 4 for each water flow season for the node—
 - (a) is equalled or exceeded in less than 35% of the days in each water flow season for the simulation period; and
 - (b) is equalled or exceeded in more than 65% of the days in each water flow season for the simulation period.

Column 1 Column 2		Column 3	Column 4
Node	January–April 50% daily flow	May–August 50% daily flow	September–December 50% daily flow
1	2193	931	483
2	1847	813	399
3	1340	672	353
4	1068	616	337
5	758	460	216
6	392	211	102
7	307	166	81
8	122	47	7
9	222	97	68
10	169	13	2
11	842	10	0
12	64	0	0

Table 1:

2 At each node mentioned in table 2, column 1, the percentage of the total number of days in the water flow season in the simulation period that the 50% daily flow stated for the water

flow season for the node in table 1 is equalled or exceeded be at least the percentage stated in table 2.

Table 2:

Column 1 Node	Column 2 January–April	Column 3 May–August	Column 4 September–December
1	37%	38%	15%
2	36%	37%	15%
4	22%	30%	10%
5	10%	25%	7%
9	34%	17%	6%

- 3 At node 8, the 50% daily flow be at least the flow stated for each water flow season in table 1 between 49% and 50% of the total number of days in the water flow season in the simulation period.
- 4 At each node mentioned in table 3, column 1, minimise the extent to which the 90% daily flow stated in columns 2 to 4 for each water flow season for the node is equalled or exceeded in less than 75% of the days in each water flow season for the simulation period.

Table 3:

Column ⁻ Node		Column 3 May–August 90% daily flow	
1	523	471	264
2	404	385	195
3	320	314	176
4	291	288	172
5	181	182	104
6	94	82	44
7	74	65	35
8	4	15	1

Table 3:

Column 1 Node		Column 3 May–August 90% daily flow	Column 4 September–December 90% daily flow
9	90	68	58
10	4	2	0
11	8	0	0
12	0	0	0

At each node mentioned in table 4, column 1, the percentage 5 of the total number of days in the water flow season in the simulation period that the 90% daily flow stated for the water flow season for the node in table 3 is equalled or exceeded be at least the percentage stated in table 4.

Table 4:

Column 1 Node	Column 2 January–Apr	Column 3 il May–August	Column 4 t September–December
1	74%	57%	30%
2	71%	56%	50%
4	50%	43%	35%
5	13%	38%	32%
9	59%	24%	8%

- 6 At node 8, the 90% daily flow be at least the flow stated for each water flow season in table 3 between 89% and 90% of the total number of days in the water flow season in the simulation period.
- At each node mentioned in table 5, column 1, the percentage 7 of the total number of days in the simulation period on which the daily flow is less than 1ML be between the minimum and maximum percentages stated for the node in column 2.

Table 5:

Column 1 Node	Column 2 Minimum–Maximum percentage
1	0–1
2	0–1
3	0–1
4	0–1
5	0–1
6	0–1
7	0–1
8	0–14
9	0–1
10	5–25
11	26–46
12	0–63

8 At each node mentioned in table 6, column 1—

- (a) minimise the extent to which the number of periods of no flow of at least 1 month but less than 3 months in the simulation period are less than the minimum or more than the maximum number stated for the node in column 2; and
- (b) minimise the extent to which the number of periods of no flow of at least 3 months in the simulation period are less than the minimum or more than the maximum number stated for the node in column 3.

Table	6:
Lable	•••

Column 1 Node	Column 2 Minimum–maximum number	Column 3 Minimum–maximum number
10	23–29	2–4

Table 6:

Column 1	Column 2	Column 3
Node	Minimum–maximum number	Minimum–maximum number
11	82-100	5–7
12	132–162	13–17

- 9 At nodes 1 to 7 and 9, there be no periods of no flow of at least 1 month in the simulation period.
- 10 At node 8, in the simulation period, there be—
 - (a) between 6 and 8 periods of no flow of at least 1 month but less than 3 months; and
 - (b) between 1 and 3 periods of no flow of at least 3 months.

Part 2 Medium to high flow objectives

- 11 At each node mentioned in table 7, column 1—
 - (a) the mean annual flow in the simulation period, expressed as a percentage of the mean annual flow for the pre-development flow pattern, be at least the percentage stated for the node in column 2; and
 - (b) the 1.5 year daily flow volume (the *1.5 year DFV*), expressed as a percentage of the 1.5 year DFV for the pre-development flow pattern, be at least the percentage stated for the node in column 3; and
 - (c) the 5 year daily flow volume (the 5 year DFV), expressed as a percentage of the 5 year DFV for the pre-development flow pattern, be at least the percentage stated for the node in column 4; and

- (d) the 10 year daily flow volume (the *10 year DFV*), expressed as a percentage of the 10 year DFV for the pre-development flow pattern, be at least the percentage stated for the node in column 5; and
- (e) the 20 year daily flow volume (the **20** year **DFV**), expressed as a percentage of the 20 year DFV for the pre-development flow pattern, be at least the percentage stated for the node in column 6.

Column 1 Node	Column 2 Mean annual flow %	1.5 year	5 Column 4 5 year DFV %	Column 5 10 year DFV %	Column 6 20 year DFV %
1	75	84	88	86	84
2	73	85	86	86	85
3	60	71	73	72	72
4	47	43	46	48	50
5	27	2	11	18	28
6	88	99	99	99	99
7	93	99	99	99	99
8	99.9	99.9	99.9	99.9	99.9
9	65	63	71	72	72
10	99	99	99	99	99
11	99	99	99	99	99
12	99	99	99	99	99

Table 7:

Part 3 Seasonal flow objectives

12 At nodes 1 to 12, the flow regime class be maintained as late summer flow regime class.

13 At each node mentioned in table 8, column 1, the annual proportional flow deviation be not more than the annual proportional flow deviation stated for the node in column 2.

Table 8:

Column 1 Node	Column 2 Annual proportional flow deviation
1	1.5
2	1.5
3	1.9
4	2.3
5	3.2
6	1.1
7	0.7
8	0.1
9	1.7
10	0.2
11	1.4

Schedule 6 Water allocation security objectives

section 20

Part 1 Supplemented water

- 1 For water allocations in a high priority group in the Mareeba–Dimbulah Water Supply Scheme—
 - (a) the annual supplemented water sharing index be at least 95%; and
 - (b) the monthly supplemented water sharing index be at least 95%; and
 - (c) the extent to which the annual supplemented water sharing index is less than 100% be minimised; and
 - (d) the extent to which the monthly supplemented water sharing index is less than 100% be minimised.
- 2 For water allocations in a medium priority group in the Mareeba–Dimbulah Water Supply Scheme—
 - (a) the annual supplemented water sharing index be at least 75%; and
 - (b) the monthly supplemented water sharing index be at least 90%; and
 - (c) the extent to which the annual supplemented water sharing index is less than 80% be minimised; and
 - (d) the extent to which the monthly supplemented water sharing index is less than 95% be minimised.

Part 2 Unsupplemented water

3 For a water allocation group mentioned in table 1, column 1, the 50%, 70%, 80% and 95% unsupplemented water sharing indices be at least the percentage stated for the water allocation group in columns 2 to 5.

Table 1					
Column 1 Water allocation group	Column 2 50%	Column 3 70%	Column 4 80%	Column 5 95%	
CA	_			80	
CB	100	90	85		
CC	100	90	85		

4 For a water allocation group mentioned in table 2, column 1, the annual volume probability be at least the percentage stated for the group in column 2.

Table 2	2
---------	---

Column 1 Water allocation group	Column 2 Annual volume probability
CA	70
CB	60
CC	90

Schedule 7 Total volumes for water allocation groups

section 38

Column 1 Water allocation group	Column 2 ML	
CA	3688	
СВ	18337	
CC	175	

Schedule 8 Rates and pump sizes

sections 40A, 41 and 45C

Column 1 Pump size (mm)	Column 2 Rate (litres/second)	Column 3 Daily volumetric limit (ML)
32	8	0.6
40	16	1
50	25	1.5
65	46	3.5
80	65	3.9
100	95	6.9
125	120	7.8
150	150	12.1
200	220	15.6
250	300	21.6
300	350	25.9
350	400	30.2
375 to 400	500	37.2
500	660	47.5
600 to 610	1200	86.4
650 to 660	1700	120

Schedule 9 Priority areas

section 61

1 Mareeba–Dimbulah priority area

The Mareeba–Dimbulah priority area consists of the following—

- (a) the part of the Barron River downstream of Tinaroo Falls Dam, including the ponded area;
- (b) the part of Tinaroo Creek between the supplementation point and the creek's confluence with the Barron River;
- (c) the part of Ada Creek between the supplementation point and the creek's confluence with Tinaroo Creek;
- (d) the part of Granite Creek between the supplementation point and the creek's confluence with the Barron River;
- (e) the part of Nicotine Creek between the supplementation point and the creek's confluence with Granite Creek;
- (f) the part of Atherton Creek between the supplementation point and the creek's confluence with Granite Creek;
- (g) the part of Cobra Creek between the supplementation point and the creek's confluence with the Barron River;
- (h) the part of Emerald Creek between the supplementation point and the creek's confluence with the Barron River;
- (i) the part of Levison Creek between the supplementation point and the creek's confluence with Emerald Creek;
- (j) the part of Shanty Creek between the supplementation point and the creek's confluence with Emerald Creek;
- (k) the part of Brindle Creek between the supplementation point and the creek's confluence with Davies Creek;
- (1) the part of Davies Creek between its confluence with Brindle Creek and its confluence with the Clohesy River;

- (m) the part of the Clohesy River between its confluence with Davies Creek and its confluence with the Barron River;
- (n) the part of the Walsh River between Collins Weir AMTD 269.1km, including the ponded area, and Flatrock Gauging Station AMTD 197.9km;
- (o) the part of Eureka Creek between Solanum Weir, including the ponded area, and the creek's confluence with the Walsh River;
- (p) the part of Murphy's Creek between the supplementation point and the creek's confluence with the Walsh River;
- (q) the part of Two Mile Creek between the supplementation point and the creek's confluence with Douglas Creek;
- (r) the part of an unnamed tributary of the Barron River between the supplementation point and the tributary's confluence with the Barron River at approximately AMTD 70.5km;
- (s) the part of Leadingham Creek between the supplementation point and the creek's confluence with the Walsh River.

2 Barron River priority area

The Barron River priority area consists of the following—

- (a) Barron River and its tributaries upstream of Lake Tinaroo, excluding Leslie Creek;
- (b) Leslie Creek and its tributaries;
- (c) Mazlin Creek and its tributaries upstream of Lake Tinaroo to its confluence with Priors Creek;
- (d) Peterson Creek and its tributaries.

Schedule 10 Dictionary

section 3

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 or junction with the main watercourse.

annual proportional flow deviation means the statistical measure of changes to flow season and volume in the simulation period calculated using the formula for annual proportional flow deviation described in Technical Report 5 of 'Fitzroy Basin Water Allocation and Management Planning Technical Reports'³ published by the department.

annual supplemented water sharing index, for water allocations in a particular priority group, means the percentage of years in the simulation period in which the allocations are fully supplied.

annual volume probability, for a water allocation group, 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 the total of the nominal volumes for the allocations in the group.

annual volumetric limit, for a water entitlement, means the maximum volume of water that may be taken under the entitlement in a water year.

authorisation means a licence, permit, interim water allocation or other authority to take water given under the Act or the repealed Act, other than a permit for stock or domestic purposes.

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

³ A copy of the reports is available for inspection on the department's website.

daily volumetric limit, for a water entitlement, means the maximum volume of water that may be taken under the entitlement in a day.

50% daily flow, for a water flow season, means the flow in megalitres that is equalled or exceeded on 50% of the days in the season in the simulation period for the pre-development flow pattern.

90% daily flow, for a water flow season, means the flow in megalitres that is equalled or exceeded on 90% of the days in the season in the simulation period for the pre-development flow pattern.

existing works—

- 1 Generally, *existing works* means works that—
- (a) allow the taking of water; and
- (b) either—
 - (i) were in existence on 20 September 2000; or
 - (ii) were started, but not completed by 20 September 2000 and—
 - (A) if a variation to a moratorium notice was granted for the works under section 42A of the Act—have been, or are being, completed in accordance with the moratorium notice, as varied; or
 - (B) otherwise—were completed by 30 November 2001.
- 2 For part 6, division 2, subdivision 2—see section 55.

flow regime class means the measure of flow regime seasonality worked out using the method stated in Haines, A.T., Finlayson, B.L. and McMahon, T.A., 'A global classification of river regimes. Applied Geography, 1988'.

food chain means a series of organisms each of which is the food of the next member of the chain.

IQQM computer program means the department's Integrated Quantity and Quality Modelling computer program, and

associated statistical analysis and reporting programs, that simulate daily stream flows, flow management, storages, releases, instream infrastructure, water diversions, water demands and other hydrologic events in the plan area.

late summer flow regime class see the Pioneer Valley Water Resource Plan Environmental Flow Report, December 2001.⁴

mean annual flow means the total volume of flow in the simulation period divided by the number of years in the simulation period.

monthly supplemented water sharing index, for water allocations in a particular priority group, means the percentage of months in the simulation period in which the allocations are fully supplied.

monthly volumetric limit means the maximum volume of water that may be taken under a water entitlement in a month.

node see section 9.

nominal entitlement see the *Water Regulation 2002*, section 65.

nominal volume means the volume of water, in megalitres, that represents the share of the water available to be taken by holders of water allocations in a priority group or a water allocation group.

period of no flow, for a node, means a period in which the flow of water in the watercourse at the node is less than 1ML a day.

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 in the plan area; and

⁴ A copy of the report may be inspected at the department's head office, Brisbane or on the department's website.

(b) no water was taken under authorisations in the plan area.

priority area see section 61.

related development permit, for an authorisation, means the development permit for the works for taking water under the authorisation.

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

seasonal volumetric limit, for a water entitlement, means the maximum volume of water that may be taken under the entitlement during the period from 1 July to 31 December.

simulated mean annual diversion, for an authorisation or a group of authorisations, means the total volume of water simulated to have been taken under the authorisation or authorisations, if the authorisation or authorisations were in existence for the whole of the simulation period, divided by the number of years in the simulation period.

simulation period means the period from 1 January 1913 to 31 December 1995.

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 20 September 2000; 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 940 was required for the works—the permit had been issued; and
- (e) if a development permit was required for the works—the permit had been given.

stock purposes, in relation to taking water, means watering stock of a number that would normally be depastured on the land.

subartesian area see section 5.

subartesian management area A see section 6.

subartesian management area B see section 6.

subcatchment area see section 7.

supplementation point means the most upstream point on a watercourse, lake or spring at which the natural flow is supplemented by water from a dam or weir.

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

surface water see section 10.

unsupplemented water means water that is not supplemented water.

50% unsupplemented water sharing index, for a group of authorisations, means the total volume of water simulated to have been taken annually under the authorisations in at least 50% of years in the simulation period, if the authorisations were in existence for the whole of the simulation period, expressed as a percentage of the simulated mean annual diversion for the authorisations.

70% unsupplemented water sharing index, for a group of authorisations, means the total volume of water simulated to have been taken annually under the authorisations in at least 70% of years in the simulation period, if the authorisations were in existence for the whole of the simulation period, expressed as a percentage of the simulated mean annual diversion for the authorisations.

80% unsupplemented water sharing index, for a group of authorisations, means the total volume of water simulated to have been taken annually under the authorisations in at least 80% of years in the simulation period, if the authorisations were in existence for the whole of the simulation period,

expressed as a percentage of the simulated mean annual diversion for the authorisations.

95% unsupplemented water sharing index, for a group of authorisations, means the total volume of water simulated to have been taken annually under the authorisations in at least 95% of years in the simulation period, if the authorisations were in existence for the whole of the simulation period, expressed as a percentage of the simulated mean annual diversion for the authorisations.

water allocation group means a water allocation group mentioned in section 43.

water flow season means any of the following periods in a year-

- (a) the period from 1 January to 30 April (*January–April*);
- (b) the period from 1 May to 31 August (*May–August*);
- (c) the period from 1 September to 31 December (*September–December*).

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.

water supply scheme means a scheme for the supply of water under an interim resource operations licence, a resource operations licence or another authority to manage water entitlements.

1.5 *year daily flow volume* means the daily flow that has a 67% probability of being reached at least once a year.

5 year daily flow volume means the daily flow that has a 20% probability of being reached at least once a year.

10 year daily flow volume means the daily flow that has a 10% probability of being reached at least once a year.

20 year daily flow volume means the daily flow that has a 5% probability of being reached at least once a year.

Endnotes

1 Index to endnotes

	Page
2	Date to which amendments incorporated
3	Key
4	Table of reprints
5	Tables in earlier reprints
6	List of legislation
7	List of annotations

2 Date to which amendments incorporated

This is the reprint date mentioned in the Reprints Act 1992, section 5(c). Accordingly, this reprint includes all amendments that commenced operation on or before 27 November 2009. Future amendments of the Water Resource (Barron) Plan 2002 may be made in accordance with this reprint under the Reprints Act 1992, section 49.

3 Key

Key to abbreviations in list of legislation and annotations

Key		Explanation	Key		Explanation
AIA	=	Acts Interpretation Act 1954	(prev)	=	previously
amd	=	amended	proc	=	proclamation
amdt	=	amendment	prov	=	provision
ch	=	chapter	pt	=	part
def	=	definition	pubd	=	published
div	=	division	R[X]	=	Reprint No. [X]
exp	=	expires/expired	RA	=	Reprints Act 1992
gaz	=	gazette	reloc	=	relocated
hdg	=	heading	renum	=	renumbered
ins	=	inserted	rep	=	repealed
lap	=	lapsed	(retro)	=	retrospectively
notfd	=	notified	rv	=	revised edition
num	=	numbered	S	=	section
o in c	=	order in council	sch	=	schedule
om	=	omitted	sdiv	=	subdivision
orig	=	original	SIA	=	Statutory Instruments Act 1992
р	=	page	SIR	=	Statutory Instruments Regulation 2002
para	=	paragraph	SL	=	subordinate legislation
prec	=	preceding	sub	=	substituted
pres	=	present	unnum	=	unnumbered
prev	=	previous			

4 Table of reprints

Reprints are issued for both future and past effective dates. For the most up-to-date table of reprints, see the reprint with the latest effective date.

If a reprint number includes a letter of the alphabet, the reprint was released in unauthorised, electronic form only.

Reprint No.	Amendments included	Effective	Notes
1	none	20 December 2002	
1A	2009 SL No. 266	27 November 2009	

5 Tables in earlier reprints

Name of table

Corrected minor errors

6 List of legislation

Water Resource (Barron) Plan 2002 SL No. 378

made by the Governor in Council on 19 December 2002

Reprint No.

1

notfd gaz 20 December 2002 pp 1359-63 commenced on date of notification exp 1 September 2013 (see SIA s 54) Note-The expiry date may have changed since this reprint was published. See the latest reprint of the SIR for any change. amending legislation-Water Resource (Barron) Amendment Plan (No. 1) 2009 SL No. 266 notfd gaz 27 November 2009 pp 1001-6 commenced on date of notification Note—An explanatory note was prepared Sustainable Planning Regulation 2009 SL No. 280 ss 1–2, pt 9 div 31 notfd gaz 27 November 2009 pp 1001-6 ss 1-2 commenced on date of notification remaining provisions commence 18 December 2009 (see s 2) List of annotations 7 Water management area ins 2009 SL No. 266 s 3 s 7A Performance indicators for water allocation security objectives s 19 amd 2009 SL No. 266 s 4 PART 5—STRATEGIES FOR ACHIEVING OUTCOMES (SURFACE WATER) **Division 4—Granting water entitlements** div 4 (ss 28-29) om 2009 SL No. 266 s 5 Application of div 5 s 31 amd 2009 SL No. 266 s 6 Purpose to be stated on water allocation s 33 sub 2009 SL No. 266 s 7 Elements of water allocation to take unsupplemented water sub 2009 SL No. 266 s 8 s 37 Annual volumetric limit **prov hdg** amd 2009 SL No. 266 s 9(1) s 39 amd 2009 SL No. 266 s 9(2) Seasonal volumetric limit ins 2009 SL No. 266 s 10 s 39A **Daily volumetric limit** s 40A ins 2009 SL No. 266 s 11 Water allocation groups **prov hdg** amd 2009 SL No. 266 s 12(1) s 43 amd 2009 SL No. 266 s 12(2)

Elements of water licence sub 2009 SL No. 266 s 13 s 44 Purpose to be stated on water licence ins 2009 SL No. 266 s 13 s 44A Nominal entitlement prov hdg sub 2009 SL No. 266 s 14(1) amd 2009 SL No. 266 s 14(2)-(6) s 45 Seasonal volumetric limit s 45A ins 2009 SL No. 266 s 15 Monthly volumetric limit s 45B ins 2009 SL No. 266 s 15 **Daily volumetric limit** s 45C ins 2009 SL No. 266 s 15 PART 6-STRATEGIES FOR ACHIEVING OUTCOMES (SUBARTESIAN WATER) pt hdg sub 2009 SL No. 266 s 16 **Division 1—General provisions** div hdg sub 2009 SL No. 266 s 16 **Application of pt 6** sub 2009 SL No. 266 s 16 s 48 **Elements of water licence** sub 2009 SL No. 266 s 16 s 49 Purpose to be stated on water licence s 49A ins 2009 SL No. 266 s 16 Limitation on taking water—Act, s 20(6) sub 2009 SL No. 266 s 16 s 50 **Relationship with Integrated Planning Act 1997** sub 2009 SL No. 266 s 16 s 51 **Division 2—Strategies for Atherton Subartesian Area only** sub 2009 SL No. 266 s 16 div hdg Subdivision 1—Applications for or about water licences sdiv hdg ins 2009 SL No. 266 s 16 Applications for subartesian management area A s 52 sub 2009 SL No. 266 s 16 Applications for subartesian management area B s 53 sub 2009 SL No. 266 s 16 **Exceptions for particular applications**

s 54 sub 2009 SL No. 266 s 16

Subdivision 2—Continued authorisations for part of subartesian management area R sdiv hdg ins 2009 SL No. 266 s 16 **Definition for sdiv 2** sub 2009 SL No. 266 s 16 s 55 Taking water using existing works authorised sub 2009 SL No. 266 s 16 s 56 Granting water licences s 57 sub 2009 SL No. 266 s 16 **Restriction on nominal entitlement** s 57A ins 2009 SL No. 266 s 16 Division 3—Strategies for Cairns Northern Beaches Subartesian Area only sub 2009 SL No. 266 s 16 div hdg Decisions about taking subartesian water ins 2009 SL No. 266 s 16 s 57B **Restriction on nominal entitlement** s 57C ins 2009 SL No. 266 s 16 Monitoring s 58 amd 2009 SL No. 266 s 17 **Resource operations licence holders to give reports** s 60 amd 2009 SL No. 266 s 18 Minor amendment of plan—Act, s 57 amd 2009 SL No. 266 s 19 s 64 PART 10—TRANSITIONAL PROVISION FOR WATER RESOURCE (BARRON) AMENDMENT PLAN (No. 1) 2009 pt 10 (s 66) ins 2009 SL No. 266 s 20 SCHEDULE 3—SUBCATCHMENT AREAS sub 2009 SL No. 266 s 21 SCHEDULE 5—ENVIRONMENTAL FLOW OBJECTIVES amd 2009 SL No. 266 s 22 SCHEDULE 6—WATER ALLOCATION SECURITY OBJECTIVES amd 2009 SL No. 266 s 23 SCHEDULE 7—TOTAL VOLUMES FOR WATER ALLOCATION GROUPS amd 2009 SL No. 266 s 24 SCHEDULE 8—RATES AND PUMP SIZES sub 2009 SL No. 266 s 25 SCHEDULE 9—PRIORITY AREAS **Barron River priority area** sub 2009 SL No. 266 s 26 s 2

SCHEDULE 10—DICTIONARY

def **"annual volume probability"** ins 2009 SL No. 266 s 27(2) def **"bore pumping test"** om 2009 SL No. 266 s 27(1) def **"daily volumetric limit"** ins 2009 SL No. 266 s 27(2) def **"existing works"** amd 2009 SL No. 266 s 27(3)–(5) def **"nominal entitlement"** ins 2009 SL No. 266 s 27(2) def **"plan area"** ins 2009 SL No. 266 s 27(2) def **"seasonal volumetric limit"** ins 2009 SL No. 266 s 27(2)

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