

# **Burnett Basin**

## **Water Management Protocol**

**February 2020**

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# Chapter 1 Preliminary

## 1 Short title

- (1) This water management protocol may be cited as the Burnett Basin Water Management Protocol.
- (2) Reference in this document to 'this protocol' means the Burnett Basin Water Management Protocol.

## 2 Commencement of the water management protocol

- (1) This protocol commenced on 6 December 2016; however
- (2) Chapter 9 of this protocol commences 1 July 2021.

## 3 Purpose of protocol

This protocol implements parts of the Water Plan (Burnett Basin) 2014.

## 4 Interpretation of words used in this protocol

Unless defined under the relevant provisions, the dictionary in attachment 1 defines particular words used in this protocol.

## 5 Area to which this protocol applies

This protocol applies to parts of the plan area defined in the Water Plan (Burnett Basin) 2014.

## 6 Water to which this protocol applies

- (1) This protocol applies to the following water in the plan area—
  - (a) water in a watercourse or lake; and
  - (b) water in a spring not connected to water to which the Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017 applies;
  - (c) unsupplemented groundwater in the—
    - (i) Coastal Burnett groundwater management area; and
    - (ii) Barambah Creek groundwater management area.

## 7 Information about areas, schemes and zones

- (1) The location of plan area and subcatchment area boundaries, water supply schemes and zones are held in digital electronic form by the department.
- (2) The location of zone boundaries are also detailed in attachment 4.
- (3) The information held in digital electronic form can be reduced or enlarged to show the details of the boundaries<sup>1</sup>.

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<sup>1</sup> The boundaries held in digital electronic form may be inspected at any of the department's offices or on <https://qldglobe.information.qld.gov.au/>

## 8 Notification of changes to data collection and reporting standards

The chief executive must notify the resource operations licence holder at least 20 business days before any substantive changes are made to the —

- (a) water monitoring data collection standards; and
- (b) water monitoring data reporting standards.



# Chapter 2 Water allocation dealing rules—supplemented allocations

## 9 Scope of chapter 2

This chapter contains water allocation dealing rules for all supplemented water allocations managed under a resource operations licence.

## 10 Definitions for chapter 2

In this chapter—

**total nominal volume in a zone** means the sum of the nominal volumes of all water allocations in the same priority group—

- (a) for the zone or zones; and
- (b) for which relevant valid water allocation dealing certificates have been issued under section 159 of the *Water Act 2000*.

## Part 1 General provisions

### 11 Assessed changes

- (1) This section applies to a holder of a water allocation in the Bundaberg water supply scheme and Boyne River and Tarong water supply scheme.
- (2) For a water allocation that states a purpose of ‘distribution loss’, the holder may apply to the chief executive under section 159 of the *Water Act 2000* to change the purpose of the water allocation to ‘any’.
- (3) The water allocation holder must provide information with the application detailing that there is sufficient volume held under water allocations to provide for distribution losses within the system.
- (4) **Distribution loss** is the nominated purpose for losses associated with the delivery of water from a diversion point on a watercourse through the holder’s off-stream distribution system.

### 12 Application for changes not specified as permitted, prohibited or assessed

An application for a change to a water allocation that is not specified as permitted, prohibited or assessed in this part or parts 2, 3, 4 or 5 of this protocol may be made in accordance with section 72 of the Water Regulation 2016.

## Part 2 Bundaberg water supply scheme

### 13 Scope of part 2

This part states the water allocation change rules for the Bundaberg water supply scheme which are permitted or prohibited in addition to changes stated in chapter 2, part 1 of this protocol.

### 14 Permitted changes

- (1) This section applies to a water allocation with a purpose of 'agriculture' or 'any'.
- (2) The following changes to a water allocation are permitted—
  - (a) a change from one of the following zones to any other of those zones if the change—
    - (i) is between AA and AB, AC, AD, CA, CB, or GZ;
    - (ii) is between AB and AA, AC, AD, CA, CB or GZ;
    - (iii) is between AC and AA, AB, AD, CA, CB or GZ;
    - (iv) is between AD and AA, AB, AC, CA, CB or GZ;
    - (v) is between CA and CB or GZ;
    - (vi) is between CB and CA or GZ;
    - (vii) is between GZ and CA or CB;
    - (viii) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 1;
    - (ix) would not result in more than 8000 ML of medium priority water allocations changing from AA, AB, AC and AD to CA, CB and GZ; and
  - (b) a change to the purpose where the change results in the purpose being 'agriculture' or 'any'.

**Table 1 – Limits of total nominal volume (ML) in a zone**

Priority group	Nominal volume	Zones						
		AA	AB	AC	AD	CA	CB	GZ
High	Minimum	3100	0	0	3990	8840	0	0
	Maximum	3600	105	280	4190	36 570	37 050	20 000
Medium	Minimum	36 025	2785	0	46 750	64 325	4 450	2 855
	Maximum	42 553	6790	5160	67 180	189 325	156 760	41 235

### 15 Prohibited changes

The following changes to a water allocation are prohibited—

- (a) a change to a location that is not mentioned in Table 1; or
- (b) a change to a priority group that is not medium or high; or
- (c) a change to a purpose that is not 'agriculture' or 'any'; or
- (d) a change to the nominal volume other than a change that is a consequence of a change to another attribute of a water allocation.

## Part 3 Upper Burnett water supply scheme

### 16 Scope of part 3

This part states the water allocation change rules for the Upper Burnett water supply scheme which are permitted or prohibited in addition to changes stated in chapter 2, part 1 of this protocol.

### 17 Permitted changes

- (1) This section applies to a water allocation with a purpose of 'agriculture' or 'any'.
- (2) The following changes to a water allocation are permitted—
  - (a) a change from one of the following zones to any other of those zones if the change—
    - (i) is between GY and GB, NA, NB, NC, OA, MA, OB, OC or SB;
    - (ii) is between GB, and GY, NA, NB, NC, OA, MA, OB, OC or SB;
    - (iii) is between NB, and GY, GB, NA, NC, OA, MA, OB, OC or SB;
    - (iv) is between NA, and GY, GB, NB, NC, OA, MA, OB, OC or SB;
    - (v) is between NC, and GY, GB, NB, NA, OA, MA, OB, OC or SB;
    - (vi) is between OA, and GY, GB, NB, NA, NC, MA, OB, OC or SB;
    - (vii) is between MA, and GY, GB, NB, NA, OA, NC, OB, OC or SB;
    - (viii) is between SB, and GY, GB, NB, NA, OA, NC, MA, OC or OB;
    - (ix) is between OB, and GY, GB, NB, NA, OA, NC, MA, OC or SB;
    - (x) is between OC, and GY, GB, NB, NA, OA, NC, OB, MA or SB;
    - (xi) is between OD and PA;
    - (xii) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 2; and
  - (b) a change to the purpose where the change results in the purpose being 'agriculture' or 'any'.

**Table 2 – Limits of total nominal volume (ML) in a zone**

Priority Group	Nominal volume	GY	GB	NA	NB	NC	MA	OA	OB	OC	SA	SB	OD	PA
High	Minimum	0	0	820	0	0	0	320	0	200	0	10	0	0
	Maximum	180	0	100 0	0	0	0	320	0	350	0	10	0	0
Medium	Minimum	960	913	195 1	3488	241 1	883	5863	640 5	0	0	0	0	0
	Maximum	741 0	736 3	860 1	10 138	12 861	10 593	16 253	11 005	428 3	400 0	405 0	1560	1560
		14 444				20 507			11 338				1560	

### 18 Prohibited changes

The following changes to a water allocation are prohibited—

- (a) a change to the location that is not mentioned in in Table 2;
- (b) a change to a priority group that is not 'medium' or 'high';
- (c) a change to a purpose that is not 'agriculture' or 'any'; and
- (d) a change to the nominal volume other than a change that is a consequence of a change to another attribute of a water allocation.

## Part 4 Barker Barambah water supply scheme

### 19 Scope of part 4

This part states the water allocation change rules for the Barker Barambah water supply scheme which are permitted or prohibited in addition to changes stated in chapter 2, part 1 of this protocol.

### 20 Permitted changes

- (1) This section applies to a water allocation with a purpose of 'agriculture' or 'any'.
- (2) The following changes to a water allocation are permitted—
  - (a) a change from one of the following zones to any other of those zones if the change—
    - (i) is between HB and HZ, HC, HD, HE or JA;
    - (ii) is between HC and HB, HZ, HD, HE or JA;
    - (iii) is between HD and HB, HZ, HC, HE or JA;
    - (iv) is between HE and HB, HZ, HC, HD or JA;
    - (v) is between HZ and HB, HC, HD, HE or JA;
    - (vi) is between JA and HB, HZ, HC, HD or HE;
    - (vii) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 3; and
  - (b) a change to the purpose where the change results in the purpose being 'agriculture' or 'any'.

**Table 3 – Limits of total nominal volume (ML) in a zone**

Priority group	Nominal volume	Zones					
		HB	HZ	HC	HD	HE	JA
High	Minimum	0	0	450	1786	0	0
	Maximum	0	0	450	1786	0	0
Medium	Minimum	9633	4953	6147	777	4343	24
		5314					
	Maximum	11 002	6659	8662	2577	7040	2721
		16 661				7314	
		11 002	15 321				

## 21 Prohibited changes

The following changes to a water allocation are prohibited—

- (a) a change to the location that is not mentioned in Table 3;
- (b) a change to a priority group that is not 'medium' or 'high';
- (c) a change to a purpose that is not 'agriculture' or 'any'; and
- (d) a change to the nominal volume other than a change that is a consequence of a change to another attribute of a water allocation.

# Part 5 Boyne River and Tarong water supply scheme

## 22 Scope of part 5

This part states the water allocation change rules for the Boyne River and Tarong water supply scheme which are permitted or prohibited in addition to changes stated in chapter 2, part 1 of this protocol.

## 23 Permitted changes

(1) The following changes to a water allocation are permitted—

- (a) a change from one of the following zones to any other of those zones if the change—
  - (i) is between LA and KA;
  - (ii) is between KA and LA;
  - (iii) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 4;
- (b) a change to the priority group from 'medium' to 'high' if—
  - (i) the conversion is of the entire volume of medium priority water specified on the water allocation; and
  - (ii) there has been no water taken under the water allocation to be converted for the relevant water year in which the application to change has been made; and
  - (iii) the location to be specified on the water allocation converted to high priority is zone KA; and
  - (iv) a conversion ratio of 2.5:1 is used to convert the volume of water from medium to high priority; and
  - (v) the conversion occurs when the announced allocation for medium priority water is no less than 100%; and
- (c) a change to the purpose where the change results in the purpose being 'agriculture' or 'any'.

**Table 4 – Limits of total nominal volume (ML) in a zone**

Priority group	Nominal volume	Zones	
		LA	KA
High	Minimum	0	32 390
	Maximum	0	37 714
Medium	Minimum	0	0
	Maximum	13 309.3	13 309.3

## 24 Prohibited changes

The following changes to a water allocation are prohibited—

- (a) a change to the location that is not permitted;
- (b) a change to the priority group that is not a change from 'medium' to 'high';
- (c) a change to the purpose that is not 'agriculture' or 'any'; and
- (d) a change to the nominal volume other than a change that is a consequence of a change to another attribute of a water allocation.

## Chapter 3      Water management areas—general provisions

### 25      Scope of chapter 3

This chapter contains general provisions which apply to all water allocations in a water management area.

### 26      Permitted changes

- (1) Subdivision of a water allocation is permitted where the maximum rate for taking water of each new water allocation will be proportional to the volume of the new water allocation.
- (2) Amalgamation of water allocations is permitted where—
  - (a) the annual volumetric limit of the new water allocation is equal to the sum of the annual volumetric limits of the water allocations being amalgamated and the new rate will be determined during the application process.
  - (b) Subsection (2)(a) does not apply to the Barker Barambah Creeks water management area.
- (3) A change to the purpose of a water allocation is permitted where the change results in the purpose being 'agriculture' or 'any'.

### 27      Prohibited changes

The following changes to a water allocation are prohibited—

- (a) a change to the purpose where the change results in the purpose being other than 'agriculture' or 'any';
- (b) a change that would alter the water allocation group that applies to a water allocation;
- (c) a change to the maximum rate of a water allocation that is not a consequence of a change to another attribute of a water allocation; and
- (d) a change to a water allocation must not be a change that would lead to the water allocation being managed under a resource operations licence.

### 28      Application for changes not specified as permitted or prohibited

An application for a change to a water allocation that is not specified as permitted or prohibited in this chapter or chapters 4, 5, 6, 7 and 8 of this protocol may be made in accordance with section 72 of the Water Regulation 2016.

# Chapter 4 Lower Burnett and Kolan Rivers water management area

## 29 Scope of chapter 4

This chapter applies to water allocations to take unsupplemented water located in the Lower Burnett and Kolan Rivers water management area.

## Part 1 Water sharing rules

### 30 Taking water under a water allocation

- (1) The take of water under a water allocation must be metered.
- (2) Water taken under the water allocation may be used for 'any' purpose.
- (3) The total volume of water taken under an allocation in a water year must not exceed the volume calculated under section 31.
- (4) A water allocation holder must advise and provide meter readings to the chief executive at the start and finish of the announced period and at the end of the water year if required by the chief executive.
- (5) Unsupplemented water may be taken under a water allocation only during an announced period.
- (6) Any water taken that is not in accordance with these rules for unsupplemented water and taken from within the limits of the Bundaberg water supply scheme will be treated as supplemented water.

### 31 Maximum annual volume

- (1) The annual announced limit ( $AAL_i$ ) is the percentage that is announced by the chief executive for each subcatchment.
- (2) The  $AAL_i$  must not be greater than 100%.
- (3) The maximum annual volume of water that may be taken in a water year will be calculated using the formula—

$$AAL_i * \text{Volumetric Limit}$$

where—

$AAL_i$  is the annual announced limit percentage (calculated in section 32).

### 32 Calculation of the annual announced limit

- (1) The chief executive must determine and announce the annual announced limit within ten business days after the start of the water year.
- (2) The annual announced limit must be determined by the following formulae—
$$TAAL_i = 50 + AAL_{i-1} - (TU_{i-1}/SVL * 100) + RAAL_{i-1}$$
$$RAAL_{i-1} = \text{greater } \{TAAL_{i-1} - 100, 0\}$$
$$AAL_i = \text{lesser } \{100, TAAL_i\}$$
- (3) The parameters used in the formulae for the annual announced limit are defined in Table 5.



**Table 5 – Parameters for calculation of the annual announced limit**

Parameter	Definition
<b>i</b>	Current water year
<b>i – 1</b>	Previous water year
<b>AAL</b>	Annual announced limit. That is, the percentage of the water allocation volumetric limit that may be taken for the water year
<b>TAAL</b>	Trial annual announced limit. That is, the trial annual announced limit is a percentage of the water allocation volumetric limit and determines the annual announced limit for a water year and the residual announced allocation limit for the next year.
<b>TU</b>	Total use. That is, the total diverted unsupplemented water allocations (ML) in the subcatchment for the water year.
<b>SVL</b>	Sum volumetric limit. That is, the sum of the volumetric limits (ML) for the subcatchment.
<b>RAAL</b>	Residual annual announced limit. That is, the residual is the amount by which the trial annual announced limit was greater than 100% in the previous year. This may be available in the following water year. The RAAL is limited between 0% and 50%.

### 33 Announced periods for taking water

The chief executive will—

- (a) determine and notify water allocation holders of the start and end of an announced period during which water may be taken for each water allocation group; and
- (b) advise the resource operations licence holder of the Bundaberg water supply scheme of the meter readings and the approved quantities of unsupplemented water taken within ten business days of the conclusion of all announced periods for the Lower Burnett and Kolan Rivers water management area.

## Part 2 Dealing with water allocations

### 34 Scope of part 2

This part states the water allocation change rules which are permitted or prohibited, in addition to changes stated in chapter 3 of this protocol.

## Division 1 Permitted changes

### 35 Permitted changes

A change from one of the following zones to any other of those zones if the change—

- (a) is between AA and AB or AC;
- (b) is between AB and AA or AC;
- (c) is between AC and AA or AB;
- (d) is between CA and CB;

- (e) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 6.

**Table 6 – Limits of total nominal volume (ML) in a zone**

Nominal volume	Zones				
	AA	AB	AC	CA	CB
Minimum	223	0	466	1082	382
Maximum	335	170	788	1828	646

## Division 2 Prohibited changes

### 36 Prohibited changes

The change to the location of a water allocation that is not permitted is prohibited.

## Part 3 Seasonal water assignment rules

### 37 Seasonal water assignment rules

The chief executive may approve a seasonal assignment for a water allocation or seasonal water assignment notice to take unsupplemented water that has not been taken in the current water year where—

- (a) the water allocation is within any zone or between zone—
  - (i) AA and AB or AC;
  - (ii) AB and AA or AC;
  - (iii) AC and AA or AB;
  - (iv) CA and CB;
- (b) the amount seasonally assigned must not exceed the unused portion of the maximum annual volume for the water allocation calculated under section 31.
- (c) the flow condition under which water may be taken under seasonal assignment is the same as the flow condition for the allocation that is being seasonally assigned;
- (d) maximum rate of take at which water may be taken under a seasonal assignment will be determined during the processing of the application;
- (e) the seasonal assignment would not result in the water allocation being managed under a resource operations licence;
- (f) the seasonal assignment would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 6.

# Chapter 5 Upper Burnett and Nogo Rivers water management area

## 38 Scope of chapter 5

This chapter applies to water allocations to take unsupplemented water located in the Upper Burnett and Nogo Rivers water management area.

## Part 1 Water sharing rules

### 39 Taking water under a water allocation

- (1) The take of water under a water allocation must be metered.
- (2) Water taken under the water allocation may be used for 'any' purpose.
- (3) The total volume of water taken under an allocation in a water year must not exceed the volume calculated under section 40.
- (4) A water allocation holder must advise and provide meter readings to the chief executive at the start and finish of the announced period and at the end of the water year if required by the chief executive.
- (5) Unsupplemented water may be taken under a water allocation only during an announced period.
- (6) Any water taken that is not in accordance with these rules for unsupplemented water and taken from within the limits of the Upper Burnett water supply scheme will be treated as supplemented water.

### 40 Maximum annual volume

- (1) The annual announced limit ( $AAL_i$ ) is the percentage that is announced by the chief executive for each subcatchment.
- (2) The  $AAL_i$  must not be greater than 100%.
- (3) The maximum annual volume of water that may be taken in a water year will be calculated—

$$AAL_i * \text{Volumetric Limit}$$

where—

$AAL_i$  is the annual announced limit percentage (calculated in section 41).

### 41 Calculation of the annual announced limit

- (1) The chief executive must determine and announce the annual announced limit within ten business days after the start of the water year.
- (2) The annual announced limit must be determined by the following formulae—
$$TAAL_i = 50 + AAL_{i-1} - (TU_{i-1}/SVL * 100) + RAAL_{i-1}$$
$$RAAL_{i-1} = \text{greater } \{TAAL_{i-1} - 100, 0\}$$
$$AAL_i = \text{lesser } \{100, TAAL_i\}$$

- (3) The parameters used in the formulae for the annual announced limit are defined in Table 7.
- (4) Despite subsection (2) the AAL is 100% for zones OD and PA.

**Table 7 – Parameters for calculation of the annual announced limit**

Parameter	Definition
<b>i</b>	Current water year
<b>i – 1</b>	Previous water year
<b>AAL</b>	Annual announced limit. That is, the percentage of the water allocation volumetric limit that may be taken for the water year.
<b>TAAL</b>	Trial annual announced limit. That is, the trial annual announced limit is a percentage of the water allocation volumetric limit and determines the annual announced limit for a water year and the residual announced allocation limit for the next year.
<b>TU</b>	Total use. That is, the total diverted unsupplemented water allocations (ML) in the subcatchment for the water year.
<b>SVL</b>	Sum volumetric limit. That is, the sum of the volumetric limits (ML) for the subcatchment.
<b>RAAL</b>	Residual annual announced limit. That is, the residual is the amount by which the trial annual announced limit was greater than 100% in the previous year. This may be available in the following water year. The RAAL is limited between 0% and 50%.

## 42 Announced periods for taking water

The chief executive will—

- (a) determine and notify water allocation holders of the start and end of an announced period during which water may be taken for each water allocation group; and
- (b) advise the resource operations licence holder of the Upper Burnett water supply scheme of the meter readings and the approved quantities of unsupplemented water taken within ten business days of the conclusion of all announced periods for the Upper Burnett and Nogo Rivers water management area.

## Part 2 Dealing with water allocations

### 43 Scope of part 2

This part states the water allocation change rules which are permitted or prohibited, in addition to changes stated in chapter 3 of this protocol.

## Division 1 Permitted changes

### 44 Permitted changes

A change from one of the following zones to any other of those zones if the change—

- (a) is between GA and GB;
- (b) is between NA and NB or NC;
- (c) is between NB and NA or NC;
- (d) is between NC and NA or NB;
- (e) is between OA and OB, OC or MA;
- (f) is between OB and OA, OC or MA;
- (g) is between OC and OA, OB or MA;
- (h) is between MA and OA, OB or OC;
- (i) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 8.

**Table 8 – Limits of total nominal volume (ML) in a zone**

Nominal volume	Zones								
	GA	GB	MA	NA	NB	NC	OA	OB	OC
Minimum	483	407	119	422	840	776	912	584	21
Maximum	806	679	199	703	1400	1293	1519	973	35

## Division 2 Prohibited changes

### 45 Prohibited changes

The change to the location of a water allocation that is not permitted is prohibited.

## Part 3 Seasonal water assignment rules

### 46 Seasonal water assignment rules

The chief executive may approve a seasonal assignment for a water allocation or seasonal water assignment notice to take unsupplemented water that has not been taken in the current water year where—

- (a) the water allocation is within any zone or between zone—
  - (i) GA and GB;
  - (ii) NA and NB or NC;
  - (iii) NB and NA or NC;
  - (iv) NC and NA or NB;
  - (v) OA and OB, OC or MA;

- (vi) OB and OA, OC or MA;
- (vii) OC and OA, OB or MA;
- (viii) MA and OA, OB or OC;
- (b) the amount seasonally assigned must not exceed the unused portion of the maximum annual volume for the water allocation calculated under section 40;
- (c) the flow condition under which water may be taken under seasonal assignment is the same as the flow condition for the allocation that is being seasonally assigned;
- (d) maximum rate of take at which water may be taken under a seasonal assignment will be determined during the processing of the application;
- (e) the seasonal assignment would not result in the water allocation being managed under a resource operations licence;
- (f) the seasonal assignment would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 8.

# Chapter 6      Barker Barambah Creeks water management area

## 47      Scope of chapter 6

This chapter applies to water allocations to take unsupplemented water located in the Barker Barambah Creeks water management area.

## Part 1                      Water sharing rules

### 48      Taking water under a water allocation

- (1)      The take of water under a water allocation must be metered.
- (2)      Water taken under the water allocation may be used for 'any' purpose.
- (3)      The total volume of water taken under an allocation in a water year must not exceed the volumetric limit for the allocation.
- (4)      A water allocation holder must advise and provide meter readings to the chief executive at the start and finish of the announced period and at the end of the water year if required by the chief executive.
- (5)      Unsupplemented water may be taken under a water allocation only during an announced period.
- (6)      Any water taken that is not in accordance with these rules for unsupplemented water and taken from within the limits of the Barker Barambah water supply scheme will be treated as supplemented water.

### 49      Announced periods for taking water

The chief executive will—

- (a)      determine and notify water allocation holders of the start and end of an announced period during which water may be taken for each water allocation group; and
- (b)      advise the resource operations licence holder of the Barker Barambah water supply scheme of the meter readings and the approved quantities of unsupplemented water taken within ten business days of the conclusion of all announced periods for the Barker Barambah Creeks water management area.

## Part 2 Dealing with water allocations

### 50 Scope of part 2

This part states the water allocation change rules which are permitted or prohibited, in addition to changes stated in chapter 3 of this protocol.

## Division 1 Permitted changes

### 51 Permitted changes

- (1) A change from one of the following zones to any other of those zones if the change—
- (a) is between HJ and HK;
  - (b) is between HK and HJ or HL;
  - (c) is between HL and HK;
  - (d) would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 9.

**Table 9 – Limits of total nominal volume (ML) in a zone**

Nominal volume	Zones				
	HJ	HK	HL	JC	JD
Minimum	2849	2876	752	34	780
Maximum	4749	4794	1254	56	1300

## Division 2 Prohibited changes

### 52 Prohibited changes

The following changes to a water allocation are prohibited—

- (a) a change to the location from—
  - (i) zone JC to any other zone;
  - (ii) zone JD to any other zone;
- (b) a change that would result in a water allocation with the water allocation group 'class 1H' being located in zone HL;
- (c) a change that would result in a water allocation with a water allocation group 'class 3H' being located in zone HJ.



## Part 3

## Seasonal water assignment rules

### 53 Seasonal water assignment rules

The chief executive may approve a seasonal assignment for a water allocation or seasonal water assignment notice to take unsupplemented water that has not been taken in the current water year where—

- (a) the water allocation is within any zone or between zone—
  - (i) HJ and HK;
  - (ii) HK and HJ or HL;
  - (iii) HL and HK;
- (b) the amount seasonally assigned must not exceed the unused portion of the annual volumetric limit of the water allocation;
- (c) the flow condition under which water may be taken under seasonal assignment is the same as the flow condition for the allocation that is being seasonally assigned;
- (d) maximum rate of take at which water may be taken under a seasonal assignment will be determined during the processing of the application;
- (e) the seasonal assignment would not result in the water allocation being managed under a resource operations licence;
- (f) the seasonal assignment would not result in a total nominal volume in a zone that is greater than the maximum volumes or less than the minimum volumes in Table 9.

# Chapter 7      Boyne and Stuart Rivers water management area

## 54      Scope of chapter 7

This chapter applies to water allocations to take unsupplemented water located in the Boyne and Stuart Rivers water management area.

## Part 1                      Water sharing rules

### 55      Taking water under a water allocation

- (1)      The take of water under a water allocation must be metered.
- (2)      The taking of water under a water allocation in groups 2K, 4K and 6K must be limited by a device approved by the chief executive.
- (3)      Water taken under the water allocation may be used for 'any' purpose.
- (4)      The total volume of water taken under an allocation in a water year must not exceed the volumetric limit for the allocation.
- (5)      A water allocation holder must provide meter readings to the chief executive at the end of the water year if required by the chief executive.
- (6)      A water allocation holder in water allocations groups 1L, 2L, 2K, 3L, 3K, 4L, 4K and 6K must provide meter readings to the chief executive at the start and finish of any period of take.
- (7)      Unsupplemented water may be taken only during announced periods in water allocation groups 1L, 2L, 3L, 3K and 4L.
- (8)      Any water taken that is not in accordance with these rules for unsupplemented water and taken from within the limits of the Boyne and Tarong water supply scheme will be treated as supplemented water.

### 56      Minimum levels in waterholes

- (1)      This section applies to waterholes within the extent of the Boyne and Stuart Rivers water management area.
- (2)      A water allocation may be taken from a waterhole only if the water level in the waterhole is above the level that is 0.5m below the level at which the waterhole normally flows.
- (3)      Section (2) does not apply if the taking of water is in accordance with section 52 of the Water Plan (Burnett Basin) 2014.

### 57      Access to water in bed sands

- (1)      Holders of water allocations in zone KB may take water from bed sands.
- (2)      The volume of water taken in the relevant water year must not exceed the water allocation holder's volumetric limit.

## 58 Maximum annual volume

- (1) The maximum volume of water that may be taken in a water year for allocations in water allocation groups 1K, 5K and 6K will be the volumetric limit as stated on the allocation.
- (2) The  $AAL_i$  must not be greater than 100%.
- (3) For water allocations groups 2K, 3K, 4K, 7K, 1L, 2L, 3L, and 4L the maximum volume of water that may be taken in a water year will be calculated using the formula—

$$AAL_i * \text{Volumetric Limit}$$

where—

$AAL_i$  is the annual announced limit percentage (calculated in section 59).

## 59 Calculation of the annual announced limit

- (1) The chief executive must determine and announce the annual announced limit within ten business days after the start of the water year;
- (2) The annual announced limit in each subcatchment, except water allocations in water allocation groups 1K, 5K and 6K, must be determined by the following formulae—

$$TAAL_i = 50 + AAL_{i-1} - (TU_{i-1}/SVL * 100) + RAAL_{i-1}$$

$$RAAL_{i-1} = \text{greater } \{TAAL_{i-1} - 100, 0\}$$

$$AAL_i = \text{lesser } \{100, TAAL_i\}$$

- (3) The parameters used in the formulae for the annual announced limit are defined in Table 10.

**Table 10 – Parameters for calculation of the annual announced limit**

Parameter	Definition
<b>i</b>	Current water year
<b>i – 1</b>	Previous water year
<b>AAL</b>	Annual announced limit. That is, the percentage of the water allocation volumetric limit that may be taken for the water year.
<b>TAAL</b>	Trial annual announced limit. That is, the trial annual announced limit is a percentage of the water allocation volumetric limit and determines the annual announced limit for a water year and the residual announced allocation limit for the next year.
<b>TU</b>	Total use. That is, for the water year, the total diverted unsupplemented water allocations (ML) in water allocation groups 2K, 3K, 4K and 7K for subcatchment K and in water allocation groups 1L, 2L, 3L and 4L for subcatchment L.
<b>SVL</b>	Sum volumetric limit. That is, the sum of the volumetric limits (ML) in water allocation groups 2K, 3K, 4K and 7K for subcatchment K and in water allocation groups 1L, 2L, 3L and 4L for subcatchment L.
<b>RAAL</b>	Residual annual announced limit. That is, the residual is the amount by which the trial annual announced limit was greater than 100% in the previous year. This may be available in the following water year. The RAAL is limited between 0% and 50%.

## **60 Announced periods for taking water**

- (1) This section does not apply to water allocations groups 1K, 2K, 4K, 5K, 6K and 7K.
- (2) The chief executive will—
  - (a) determine and notify water allocation holders in water allocation groups 1L, 2L, 3L, 3K and 4L of the start and end of an announced period during which water may be taken for each water allocation group; and
  - (b) advise the resource operations licence holder of the Boyne and Tarong water supply scheme of the approved quantities of unsupplemented water taken within ten business days of the conclusion of all announced periods for the Boyne and Stuart Rivers Water Management Area where water is taken from supplemented reaches of the Boyne River.

## **Part 2 Dealing with water allocations**

### **61 Scope of part 2**

This part states the water allocation change rules which are prohibited, in addition to changes stated in chapter 3 of this protocol.

### **62 Prohibited changes**

A change to the location of a water allocation from zone LA, KA, KB, KC, KD and KE to any other zone is prohibited.

## **Part 3 Seasonal water assignment rules**

### **63 Seasonal water assignment rules**

The chief executive may approve a seasonal assignment for a water allocation or seasonal water assignment notice to take unsupplemented water that has not been taken in the current water year where—

- (a) the water allocation is within the same zone;
- (b) the amount seasonally assigned must not exceed the unused portion of the maximum annual volume for the water allocation calculated under section 58;
- (c) the flow condition under which water may be taken under seasonal assignment is the same as the flow condition for the allocation that is being seasonally assigned;
- (d) maximum rate of take at which water may be taken under a seasonal assignment will be determined during the processing of the application;
- (e) the seasonal assignment would not result in the water allocation being managed under a resource operations licence.

# Chapter 8 Coastal Burnett groundwater management area

## 64 Scope of chapter 8

This chapter applies to water allocations and water licences that take unsupplemented water located in the Coastal Burnett groundwater management area.

## Part 1 Water sharing rules

### Division 1 Water allocations

#### 65 Announced entitlements for taking water

- (1) The announced entitlement (AE) is the proportion of a water allocation's annual volumetric limit that an allocation holder is entitled to extract for a given water year.
- (2) The chief executive must—
  - (a) calculate and set the announced entitlement for each zone group to take effect on the first day of each water year in accordance with section 67;
  - (b) recalculate the announced entitlement for a zone group—
    - (i) quarterly;
    - (ii) following a significant recharge event; or
    - (iii) following the adjustment of a seawater intrusion index to 1, in accordance with section 66(3);
  - (c) reset the announced entitlement for a zone group if a recalculation indicates that the set announced entitlement would increase by five or more percentage points;
  - (d) apply the announced entitlement set for a zone group, to all zones within that zone group; and
  - (e) publish details on the department's website of the set announced entitlement for each zone in the Coastal Burnett groundwater management area within five business days of setting or resetting an announced entitlement.

#### 66 Seawater intrusion index

- (1) The preferential seawater intrusion index ( $SII_{pref}$ ) applies to water allocations in water allocations groups—CB-KBA-A, CB-BEA-A and CB-FMA-A and the standard seawater intrusion index ( $SII_{std}$ ) applies to water allocations in water allocation groups—CB-KBA-B, CB-BEA-B, CB-EGA-B and CB-FMA-B in each zone group mentioned in Table 12, column 1. The seawater intrusion indices mentioned in Table 12 must be determined as follows—
  - (a) if the electrical conductivity of water in the bore mentioned in Table 12, column 2, at the depth mentioned in column 3, is less than the level mentioned in Table 12, column 4, then  $SII_{std}$  is 1 and  $SII_{pref}$  is 1; or

- (b) if the electrical conductivity of water in the bore mentioned in Table 12, column 2, at the depth mentioned in column 3, is greater than or equal to the level mentioned in Table 12, column 4, but less than the level mentioned in Table 12, column 5 then  $SII_{std}$  is 0.5 and  $SII_{pref}$  is 0.75; or
  - (c) if the electrical conductivity of water in the bore mentioned in Table 12, column 2, at the depth mentioned in column 3, is greater than or equal to the level mentioned in Table 12, column 5 then  $SII_{std}$  is 0 and  $SII_{pref}$  is 0.5.
- (2) Despite subsection (1)(a), (1)(b) and (1)(c), the preferential seawater intrusion index and standard seawater intrusion index will be 1 if the chief executive is satisfied that an electrical conductivity reading is unrelated to the intrusion of seawater.
  - (3) The preferential seawater intrusion index and standard seawater intrusion index will increase to 1 when the conductivity of water in the corresponding bore mentioned in Table 12, column 2, at the depth mentioned in Table 12, column 3, is less than or equal to the level mentioned in Table 12, column 6.

## 67 Announced entitlement calculation

- (1) The annual volume of water that may be taken under a water allocation in a water year will be calculated using the following formulae—
  - (a) for preferential access water allocations - Annual Volumetric Limit \*  $AE_{pref}$
  - (b) for standard access water allocations - Annual Volumetric Limit \*  $AE_{std}$
- (2) For each zone group mentioned in attachment 2 that contains zone(s) with water allocations in water allocation groups CB-KBA-A, CB-BEA-A or CB-FMA-A the announced entitlement for preferential access water allocations must be calculated using the formula—

$$AE_{pref} = 100\% * SII_{pref}$$

- (3) For each zone group mentioned in attachment 2, table 1 that contains zone(s) with water allocations in water allocation groups CB-KBA-B, CB-BEA-B, CB-EGA-B or CB-FMA-B, the announced entitlement for standard access water allocations must be calculated as follows—
  - (a) determine the groundwater level for each assessment site in the relevant zone group mentioned in the decision tables in attachment 2;
  - (b) round down each level to a corresponding water level mentioned in the decision tables in attachment 2;
  - (c) for each level determined in (3)(b) select the corresponding announcement factor for that assessment site;
  - (d) determine the announced entitlement using the following formula, rounded to the nearest 5%—

$$AE_{std} = (f_1 + f_2 + \dots + f_n) / n * SII_{std}$$

- (4) The parameters used in the formulae in this section for the announced entitlement are defined in Table 11.

**Table 11 – Parameters for calculation of the announced entitlement**

Parameter	Definition
<b>AE<sub>pref</sub></b>	Announced entitlement for preferential access water allocations, calculated under section 67(2).
<b>AE<sub>std</sub></b>	Announced entitlement for standard access water allocations, calculated under section 67(3).
<b>Annual volumetric limit</b>	The annual volumetric limit stated on the water allocation.
<b>SII<sub>pref</sub></b>	Preferential access seawater intrusion index as calculated in section 66.
<b>SII<sub>std</sub></b>	Standard access seawater intrusion index as calculated in section 66.
<b>n</b>	Number of assessment sites for each respective zone group.
<b>f<sub>i</sub></b>	Announcement factor for a particular assessment site.

**Table 12 – Seawater intrusion index, trigger bore and conductivity levels**

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Zone group(s)	Trigger bore (RN <sup>2</sup> )	Elevation (m AHD)	Stage 1 (µS/cm <sup>3</sup> )	Stage 2 (µS/cm)	Recovery target (µS/cm)
ZG01 and ZG03	13500110B	-13.05	2450	2950	2200
ZG02 and ZG03	13500117B	-20.73	1400	2650	1000
ZG04 and ZG05	13600174A	-17.85	1150	1650	900
ZG11, ZG14, and ZG15	13600220B	-22.86	1800	1900	1700
ZG11 and ZG15	13700199B	-7.81	1700	1900	1500
ZG13 and ZG16	13700157A	-8.09	3300	4000	3000
ZG14 and ZG17	13600223A	-12.62	850	1350	600
ZG21 and ZG22	13700186A	-0.76	1900	2100	1850
ZG36	13500170A	-57.84	1650	2500	1200
ZG38	13700205A	-30.43	1500	1550	1450

## 68 Taking water under a water allocation or other authorisation in zone 80, 81 and 82

- (1) Authorisation holders in zone 80, 81 and 82 must cease groundwater extraction when either—
  - (a) the assessed groundwater level at site 427294E 7262873N is at or below - 3.5 m AHD; or
  - (b) the assessed groundwater level at site 426640E 7263852N is at or below - 4.0 m AHD.
- (2) Authorisation holders may recommence groundwater extraction when—
  - (a) the assessed groundwater level at site 427294E 7262873N is at or above 0.5 m AHD; and
  - (b) the assessed groundwater level at site 426640E 7263852N is at or above 0.0 m AHD.

<sup>2</sup> RN refers to the Registered Number recorded in the departmental groundwater database.

<sup>3</sup> µS/cm is the abbreviation for microSiemens per centimetre, a unit of measurement for electrical conductivity.

- (3) The chief executive will notify the holders of the water allocations to which these rules apply when the cessation or recommencement rules in this section apply.
- (4) In this section—  
**site** is a geographical location stated in eastings and northings as Map Grid of Australia 1994 (MGA94) zone 56 coordinates for which the assessed groundwater level is to be determined.

## 69 Taking water under a water allocation

- (1) Despite sections 67 and 68, water allocation holders are prohibited to take water under a water allocation if the electrical conductivity of the water taken would be greater than 2500 microSiemens per centimetre ( $\mu\text{S}/\text{cm}$ ).
- (2) Subsection 1 does not apply if the chief executive is satisfied that an electrical conductivity reading greater than 2500  $\mu\text{S}/\text{cm}$  is unrelated to the intrusion of seawater.

## Division 2 Water licences

### 70 Announced entitlement for taking water

- (1) The announced entitlement (AE) is the proportion of a water licence's nominal entitlement volume that a licence holder is entitled to extract for a given water year.

The chief executive must—

- (a) calculate and set the announced entitlement for each zone to take effect on the first day of each water year in accordance with section 71; and
- (b) make a recalculation of the announced entitlement for a zone quarterly or following a significant recharge event, in accordance with section 71; and
- (c) reset the announced entitlement for a zone if a recalculation indicates that the set announced entitlement would increase by five or more percentage points; and
- (d) publish details on the department's website of the set announced entitlement for each zone in the Coastal Burnett groundwater management area within five business days of setting or resetting an announced entitlement.

### 71 Announced entitlement calculation

For each zone in the Coastal Burnett groundwater management area that contains water licences to which this division applies, the announced entitlement must be calculated as follows—

- (a) determine the groundwater level for each assessment site in the relevant zone group mentioned in the decision tables in attachment 3;
- (b) round down each level to a corresponding water level mentioned in the decision tables in attachment 3;
- (c) for each level determined in (b), select the corresponding announcement factor for that site;
- (d) determine the announced entitlement using the formula below and round the result to the nearest 5%;

$$AE_{WL} = (f_1 + f_2 \dots + f_n) / n$$



- (e) The parameters used in the formula for the announced entitlement are defined in Table 13.

**Table 13 – Parameters for calculation of the announced entitlement**

Parameter	Definition
$AE_{WL}$	Announced entitlement for water licences
$n$	Number of assessment sites for each respective zone
$f_i$	Announcement factor for a particular assessment site

## Part 2 Dealings with water allocations

### 72 Scope of part 2

This part states the water allocation change rules which are permitted or prohibited, in addition to changes stated in chapter 3 of this protocol.

## Division 1 Permitted changes

### 73 Permitted changes

- (1) The following changes to a water allocation are permitted—
- (a) a change to the location, if the water allocation states for water allocation groups CB-KBA-A, CB-BEA-A or CB-FMA-A, if the change—
    - (i) would not result in a change to a location in a different subarea;
    - (ii) the new location is a zone mentioned in Table 15;
    - (iii) would not result in the total nominal volume of preferential access water allocations for a zone greater than the allowable nominal volume for the zone identified in Table 15;
    - (iv) would not result in the total nominal volume of preferential access water allocations for a zone group greater than the allowable nominal volume for the zone group identified in Table 15;
  - (b) a change to the location, if the water allocation states water allocation group CB-KBA-B, CBBEA-B, CB-EGA-B or CB-FMA-B, if the change—
    - (i) would not result in a change to a location in a different subarea;
    - (ii) the new location is a zone mentioned in Table 16;
    - (iii) would not result in the total nominal volume of standard access water allocations for a zone greater than the allowable nominal volume for the zone identified in Table 16;
    - (iv) would not result in the total nominal volume of standard access water allocations for a zone group greater than the allowable nominal volume for the zone group identified in Table 16;
    - (v) the annual volumetric limit of the water allocation is changed using the following formula—

$$WA_{AVL} = WA_{nv} \times ZG_{ti}$$

- (vi) the parameters used in the formula for the annual volumetric limit are defined in Table 14.

**Table 14 – Parameters for calculation of the annual volumetric limit**

Parameter	Definition
<b>WA<sub>AVL</sub></b>	Annual volumetric limit for the water allocation. This will be rounded to the nearest 1ML.
<b>WA<sub>nv</sub></b>	Nominal volume for the water allocation
<b>ZG<sub>ti</sub></b>	Trading index for the zone group relating to the destination zone, as detailed in Table 16.

- (2) In this section—

**total nominal volume of preferential access water allocations for a zone** is the total nominal volume of all water allocations in water allocation groups CB-KBA-A, CB-BEA-A and CB-FMA-A located in the zone and for which relevant valid water allocation dealing certificates have been issued under section 159 of the *Water Act 2000*.

**total nominal volume of preferential access water allocations for a zone group** is the total nominal volume of all water allocations in water allocation groups CB-KBA-A, CB-BEA-A and CB-FMA-A located in zones within the zone group and for which relevant valid water allocation dealing certificates have been issued under section 159 of the *Water Act 2000*.

**total nominal volume of standard access water allocations for a zone** is the total nominal volume of all water allocations in water allocation groups CB-KBA-B, CB-BEA-B, CB-EGA-B and CB-FMA-B located in the zone and for which relevant valid water allocation dealing certificates have been issued under section 159 of the *Water Act 2000*.

**total nominal volume of standard access water allocations for a zone group** is the total nominal volume of all water allocations in water allocation groups CB-KBA-B, CB-BEA-B, CB-EGA-B and CB-FMA-B located in zones within the zone group and for which relevant valid water allocation dealing certificates have been issued under section 159 of the *Water Act 2000*.

## Division 2 Prohibited changes

### 74 Prohibited changes

The following changes to a water allocation are prohibited—

- (a) a change to the purpose;
- (b) a change to the water allocation group;
- (c) for water allocations in water allocation groups CB-KBA-B, CB-BEA-B, CB-EGA-B and CB-FMA-B, a change to a location if—
  - (i) it would result in a change to a location in a different subarea mentioned in Table 15 or Table 16;
  - (ii) the new location is not a zone mentioned in Table 15 or Table 16;

- (iii) it would result in the total nominal volume of standard access water allocations for a zone greater than the allowable nominal volume for the zone identified in Table 16;
  - (iv) it would result in the total nominal volume of standard access water allocations for a zone group greater than the allowable nominal volume for the zone group identified in Table 16; or
  - (v) the annual volumetric limit of the water allocation is changed other than using the formula in section 73.
- (d) In this section—

**total nominal volume of standard access water allocations for a zone** is the total nominal volume of all water allocations in water allocation groups CB-KBA-B, CB-BEA-B, CB-EGA-B and CB-FMA-B located in the zone.

**total nominal volume of standard access water allocations for a zone group** is the total nominal volume of all water allocations in water allocation groups CB-KBA-B, CB-BEA-B, CB-EGA-B and CB-FMA-B located in zones within the zone group.

**Table 15 – Zone and zone group allowable nominal volumes for preferential access water allocations**

Subarea	Zone Group	Zone Group Allowable Nominal Volume (ML)	Zone	Zone Allowable Nominal Volume (ML)
Column 1	Column 2	Column 3	Column 4	Column 5
<b>Coastal Burnett Unit 1</b>				
Kolan Burnett A	ZG03 (Booyan)	230	004	230
	ZG04 (Gooburrum)	15	010	15
	ZG06 (Welcome Creek/ Meadowvale/ Oakwood)	150	017	150
Burnett Elliott A	ZG17 (Bundaberg)	6 020	053	6 020
	ZG18 (Alloway)	225	060	225
<b>Coastal Burnett Unit 2</b>				
Fairymead A	ZG38 (Woongarra/ Windermere)	200	088	200
	ZG39 (Calavos lower)	200	090	200

**Table 16 – Zone and zone group allowable nominal volumes for standard access water allocations**

Subarea	Zone Group	Zone Group Allowable Nominal Volume (ML)	Zone	Zone Allowable Nominal Volume (ML)	Standard Access Trade Index
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
<b>Coastal Burnett Unit 1</b>					

Subarea	Zone Group	Zone Group Allowable Nominal Volume (ML)	Zone	Zone Allowable Nominal Volume (ML)	Standard Access Trade Index
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Kolan Burnett A	ZG03 (Booyan)	4670	004	380	1.31
			005	1 418	
			006	957	
			007	870	
			008	1 571	
	ZG04 (Gooburrum)	4791	009	1 736	1.21
			010	601	
			011	864	
			012	403	
			013	824	
			014	880	
	ZG06 (Welcome Creek/ Meadowvale / Oakwood)	2383	017	550	1.11
			018	586	
			019	924	
			020	561	
Burnett Elliott A	ZG15 (Woongarra)	3227	038	686	1.94
			039	420	
			040	436	
			041	10	
			042	332	
			043	784	
			044	906	
	ZG16 (Calavos)	5541	045	464	1.57
			046	754	
			047	655	
			048	1 360	
			049	751	
			050	782	
			051	874	
			052	755	
	ZG17 (Bundaberg)	2426	053	254	1.42
			054	1 088	
			055	1 067	
			056	58	
			057	304	
	ZG18 (Alloway)	1389	058	470	1.10
			059	760	
			060	298	

Subarea	Zone Group	Zone Group Allowable Nominal Volume (ML)	Zone	Zone Allowable Nominal Volume (ML)	Standard Access Trade Index
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Elliott Gregory A	ZG21 (Elliott River south)	1643	063	386	1.0
			064	1 003	
			065	418	
Coastal Burnett Unit 2					
Fairymead A	ZG38 (Woongarra/ Windermere)	1521	084	589	1.5
			085	173	
			086	84	
			087	495	
			088	277	
			089	132	
	ZG39 (Calavos lower)	1389	090	502	1.14
			091	1 026	
	ZG40 (Coonarr Road west)	1086	092	1 086	1.15
	ZG41 (Mahogany Creek)	2231	094	1 086	1.32
095			1 368		

## Part 3 Seasonal water assignment rules

### Division 1 Water allocations

#### 75 Seasonal water assignment rules within zones and between zones and zone groups

- (1) The chief executive may approve a seasonal water assignment for a water allocation or seasonal water assignment notice to take unsupplemented water that has not been taken in the current water year if —
  - (a) the zone from which the extraction would occur under the assignment is the same as the location for the water allocation.
  - (b) the zone from which the extraction would occur under the assignment is not the location for the water allocation, if—
    - (i) the zone from which the extraction would occur under the assignment is a zone mentioned in Table 17;
    - (ii) the approval would result in a potential take volume for a zone calculated in section 76(1) less than or equal to the total allowable take volume for that zone;
    - (iii) the approval would result in a potential take volume for a zone group calculated in section 76(2) less than or equal to the total allowable take volume for that zone group calculated .
- (2) In addition to subsection (1), the chief executive may approve a seasonal assignment of a water allocation located within zone group 36 if—

- (a) the zone from which the extraction would occur under the assignment is located within the Kolan Burnett A sub-area; and
- (b) the seasonal assignment volume is not greater than 25% of the total announced entitlement for all water allocations located in zone group 36; and
- (c) the seasonal assignment volume is not greater than 50% of the announced entitlement for the water allocation.

**Table 17 – zone and zone group allowable take volumes**

Zone Group	Zone Group Allowable Take Volumes (ML)		Zone	Zone Allowable Take Volume (ML)	
	Preferential Access	Standard Access		Preferential Access	Standard Access
Coastal Burnett Unit 1					
ZG03 (Booyan)	230	6111	004	230	497
			005	0	1858
			006	0	1254
			007	0	1139
			008	0	2084
ZG04 (Gooburrum)	15	5787	009	0	2100
			010	15	727
			011	0	1045
			012	0	487
			013	0	997
			014	0	1064
ZG06 (Welcome Creek/ Meadowvale/ Oakwood)	150	2645	017	150	611
			018	0	651
			019	0	1026
			020	0	622
ZG15 (Woongarra)	0	6276	038	0	1331
			039	0	814
			040	0	845
			041	0	19
			042	0	643
			043	0	1522
			044	0	1758
ZG16 (Calavos)	0	8708	045	0	728
			046	0	1184
			047	0	1028
			048	0	2135
			049	0	1180
			050	0	1228
			051	0	1372

Zone Group	Zone Group Allowable Take Volumes (ML)		Zone	Zone Allowable Take Volume (ML)	
	Preferential Access	Standard Access		Preferential Access	Standard Access
			052	0	1185
ZG17 (Bundaberg)	6020	3453	053	6 020	361
			054	0	1544
			055	0	1515
			056	0	82
			057	0	431
ZG18 (Alloway)	225	1528	058	0	517
			059	0	836
			060	225	327
ZG21 (Elliott River south)	0	1643	063	0	386
			064	0	1003
			065	0	418
Coastal Burnett Unit 2					
ZG38 (Woongarra/ Windermere)	200	2388	084	0	883
			085	0	259
			086	0	12
			087	0	743
			088	200	415
			089	0	198
ZG39 (Calavos lower)	200	1583	090	200	572
			091	0	1170
ZG40 (Coonarr Road west)	0	1249	092	0	1249
ZG41 (Mahogany Creek)	0	2949	094	0	1433
			095	0	1806

## 76 Potential take volume calculation

- (1) The potential take volume for a zone, for a given point in time is to be calculated using the following formula—

$$PTV_Z = (ZVL_{pref} * AE_{pref}) + (ZVL_{std} * AE_{std}) + SWA_{in} - SWA_{out}$$

- (2) The potential take volume for a zone group, for a given point in time is to be calculated the following formula—

$$PTV_{ZG} = (ZGVL_{pref} * AE_{pref}) + (ZGVL_{std} * AE_{std}) + SWA_{in} - SWA_{out}$$

- (3) The parameters used in calculating the potential take volume are defined in Table 18 and Table 19.

**Table 18 – Parameters for calculation of the potential take volume – subsection (1)**

Parameter	Definition
<b>PTV<sub>z</sub></b>	Potential take volume for a zone
<b>SWA<sub>in</sub></b>	The volume of water seasonally assigned into the zone for the current water year.
<b>SWA<sub>out</sub></b>	The volume of water seasonally assigned out of the zone for the current water year.
<b>ZVL<sub>pref</sub></b>	The sum of the volumetric limits of preferential access water allocations located in the zone.
<b>ZVL<sub>std</sub></b>	The sum of the volumetric limits of standard access water allocations located in the zone.
<b>IAE<sub>pref</sub></b>	Current announced entitlement for preferential access water allocations for the zone.
<b>AE<sub>std</sub></b>	Current announced entitlement for standard access water allocations for the zone.

**Table 19 – Parameters for calculation of the potential take volume – subsection (2)**

Parameter	Definition
<b>PTV<sub>ZG</sub></b>	Potential take volume for a zone group
<b>SWA<sub>in</sub></b>	The volume of water seasonally assigned into the zone group for the current water year.
<b>SWA<sub>out</sub></b>	The volume of water seasonally assigned out of the zone group for the current water year.
<b>ZGVL<sub>pref</sub></b>	The sum of the volumetric limits of preferential access water allocations located in the zone group.
<b>ZGVL<sub>std</sub></b>	The sum of the volumetric limits of standard access water allocations located in the zone group.
<b>AE<sub>pref</sub></b>	Current announced entitlement for preferential access water allocations for the zone group
<b>AE<sub>std</sub></b>	Current announced entitlement for standard access water allocations for the zone group.

## 77 Total allowable take volume calculation

- (1) The total allowable take volume for a zone, for a given point in time is to be calculated using the following formula—

$$TATV_Z = (ZATV_{pref} * AE_{pref}) + (ZATV_{std} * AE_{std})$$

- (2) The total allowable take volume for a zone group, for a given point in time is to be calculated using the following formula—

$$TATV_{ZG} = (ZGATV_{pref} * AE_{pref}) + (ZGATV_{std} * AE_{std})$$



- (3) The parameters used in calculating the total allowable take volume is defined in Table 20 and Table 21.

**Table 20 – Parameters for calculation of the total allowable volume– subsection (1)**

Parameter	Definition
<b>TATV<sub>z</sub></b>	Total allowable take volume for a zone.
<b>ZATV<sub>pref</sub></b>	The preferential access allowable take volume for a given zone as stated in Table 17.
<b>ZATV<sub>std</sub></b>	The standard access allowable take volume for a given zone as stated in Table 17.
<b>AE<sub>pref</sub></b>	Current announced entitlement for preferential access water allocations for the zone.
<b>AE<sub>std</sub></b>	Current announced entitlement for standard access water allocations for the zone.

**Table 21 – Parameters for calculation of the total allowable volume– subsection (2)**

Parameter	Definition
<b>TATV<sub>zG</sub></b>	Total allowable take volume for a zone group.
<b>ZGATV<sub>pref</sub></b>	The preferential access allowable take volume for a given zone group as stated in Table 17.
<b>ZGATV<sub>std</sub></b>	The standard access allowable take volume for a given zone group as stated in Table 17.
<b>AE<sub>pref</sub></b>	Current announced entitlement for preferential access water allocations for the zone group.
<b>AE<sub>std</sub></b>	Current announced entitlement for standard access water allocations for the zone group.

- 78 **Prohibited seasonal assignments between zones and zone groups**  
A seasonal water assignment that is not permitted under section 75 is prohibited.

## Division 2 Water licences

- 79 **Seasonal water assignment rules**
- (a) The chief executive may only approve a seasonal water assignment for a water licence or seasonal water assignment notice to take unsupplemented water that has not been taken in the current water year where— the seasonal water assignment will be for taking water from a lot/plan within the location zone stated on the licence; and
  - (b) the volume of the seasonal water assignment is no greater than the unused nominal entitlement that may be taken under the authority of the water licence.

# Chapter 9      Barambah Creek groundwater management area

## 80      Scope of chapter 9

This chapter applies to water licences that take unsupplemented groundwater located in the Barambah Creek groundwater management area.

## 81      Sub-areas

Each of the sub-areas are shown on the map in attachment 4.

# Part 1      Water sharing rules

## 82      Annual announced volume for taking water

- (1) The annual announced volume is the volume of water that a water licence holder is entitled to take for a given water year in accordance with section 84.
- (2) For each sub-area the chief executive must—
  - (a) calculate and set the announced entitlement to take effect on the first day of each water year in accordance with section 83;
  - (b) recalculate the announced entitlement quarterly;
  - (c) reset the announced entitlement if a recalculation indicates that the set announced entitlement would increase; and
  - (d) publish details on the department's website of the set announced entitlement within five business days of setting or resetting an announced entitlement.

## 83      Announced entitlement calculation

For each sub-area the announced entitlement must be calculated as follows—

- (a) for each assessment site mentioned in Table 22, determine the announced entitlement factor based on the corresponding groundwater level;
- (b) for each sub-area, average the announced entitlement factors and round to the nearest 25%;
- (c) if the monitoring bore used for the assessment site cannot be used, another method of determining the groundwater level may be used, subject to approval by the chief executive.

**Table 22 – Announced entitlement decision table**

Sub-area	Assessment site (registered number)	Announced entitlement factor		
		50%	75%	100%
		Groundwater level metres AHD	Groundwater level metres AHD	Groundwater level metres AHD
A	13620177	<256.87	256.87 - 257.29	>257.29
A	13620179	<256.04	256.04 - 256.46	>256.46
A	13620341	<255.86	255.86 - 256.28	>256.28
B	13620151	<263.90	263.90 - 264.25	>264.25
B	13620167	<260.85	260.85 - 261.20	>261.20
B	13620340	<263.53	263.53 - 263.88	>263.88
C	13620163	<261.07	261.07 - 261.62	>261.62
C	13620172	<257.43	257.43 - 257.98	>257.98
C	13620338	<269.11	269.11 - 269.66	>269.66
D	13620190	<255.02	255.02 - 255.65	>255.65
D	13620342	<255.80	255.80 - 256.43	>256.43
D	13620343	<253.20	253.20 - 253.83	>253.83

#### 84 Annual announced volume

The annual announced volume for—

- (a) a water licence with a nominal entitlement of 10ML or more, is the greater of—
  - (i) the nominal entitlement multiplied by the announced entitlement for that sub-area; or
  - (ii) 10ML.
- (b) A water licence with a nominal entitlement less than 10ML, is the nominal entitlement.

# Chapter 10      Monitoring

## 85      Monitoring

The chief executive must measure and record—

- (a)    water quantity;
- (b)    water quality;
- (c)    water taken;
- (d)    groundwater levels;
- (e)    salinity profiles for the Coastal Burnett groundwater management area.

## 86      Natural ecosystems monitoring

The chief executive must collect and keep publicly available information on ecological assets that are linked to the ecological outcomes of the Water Plan (Burnett Basin) 2014.

## 87      Assessment

The chief executive must make ongoing assessments of whether the trends in the data measured, collected and recorded under sections 85 and 86 of this protocol indicate that outcomes specified in the Water Plan (Burnett Basin) 2014 are being achieved.

# Attachment 1 Dictionary

Term	Definition
AHD	Refers to Australian Height Datum, a geodetic datum for altitude measurement in Australia.
annual volumetric limit	For the purpose of this protocol, the annual volumetric limit, refers to the maximum volume of water authorised to be taken under an unsupplemented water allocation or water licence.
high priority water allocation	A water allocation within a priority group for which the WASO (performance indicator) is in the range specified in the Water Plan (Burnett Basin) 2014.
medium priority water allocation	A water allocation within a priority group for which the WASO (performance indicator) is in the range specified in the Water Plan (Burnett Basin) 2014.
MGA94	Is used in relation to geographical co-ordinates stated in the Map Grid of Australia 1994 (MGA94) Zone 56 datum.
nominal allocation	The quantity of water apportioned under an existing authorisation for a regulated water supply.
nominal entitlement	Is the volume of water authorised to be taken during a water year under a water licence.
potential take volume	Refers to the total volume of water authorised to be taken from a zone or zone group at a given point in time considering the current announced entitlement as well as any seasonal water assignments.
preferential access water allocations	Water allocations belonging to a preferential access water allocation group.
preferential access water allocation groups	Refers to water allocation groups CB-KBA-A, CB-BEA-A, CB-EGA-A and CB-FMA-A, which includes water allocations converted from existing authorisations for 'town water supply' or 'urban' purposes.
priority group	A grouping of water allocations for taking supplemented water from a water supply scheme with the same WASO.
seawater intrusion	Means the movement inland of seawater into aquifers that contain freshwater.
standard access water allocations	Water allocations belonging to a standard access water allocation group.
standard access water allocation groups	Refers to water allocation groups CB-KBA-B, CB-BEA-B, CB-EGA-B and CB-FMA-B, which includes water allocations converted from existing authorisations for purposes other than 'town water supply' or 'urban' purposes.
supplemented water	Supplemented water means water supplied under an interim resource operations licence, resource operations licence or other authority to operate water infrastructure.
total allowable take volume	Refers to the maximum volume of water that may be authorised to be taken in a zone or zone group at a given point in time considering the current announced entitlement.
unsupplemented water	Unsupplemented water means water that is not supplemented water.
volume of water allocation	The maximum quantity of water that may be taken in a water year in accordance with the terms and conditions of a water allocation.

waterhole	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.
zone	A geographic location defined by a reach of a watercourse. Zones are for defining the location of a water allocation and operational arrangements under the water management protocol or relevant operations manual. Zones are defined in the Water Plan (Burnett Basin) 2014.
zone group	A zone group is a group of zones to which similar management rules are applied.

# Attachment 2 Coastal Burnett groundwater management area: Water allocation announced entitlement decision tables

Assessment site geographical locations in this attachment are stated in eastings (E) and northings (N) as Map Grid of Australia 1994 (MGA94) zone 56 coordinates.

**Table 1: Index of announced entitlement decision tables**

Zone group	Zones	Table number
ZG01	001	2
ZG02	002-003	3
ZG03	004-008	4
ZG04	009-014	5
ZG05	015-016	6
ZG06	017-020	7
ZG11	025-026	8
ZG12	027-029	9
ZG13	030-036	10
ZG14	037	11
ZG15	038-044	12
ZG16	045-052	13
ZG17	053-057	14
ZG18	058-060	15
ZG21	063-065	16
ZG22	066	17
ZG23	067	18
ZG24	068	19
ZG36	080-082	20
ZG38	084-089	21
ZG39	090-091	22
ZG40	092-093	23
ZG41	094-095	24

**Table 2: Zone group 01—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 424410 N:7266805	Groundwater level metres AHD Assessment site 2 E: 425850 N:7265274	Groundwater level metres AHD Assessment site 3 E: 425678 N:7266380	Announcement factor %
0.5	0.50	0.52	0
0.53	0.53	0.54	5
0.57	0.57	0.55	10
0.60	0.60	0.57	15
0.63	0.63	0.58	20
0.67	0.67	0.60	25
0.70	0.70	0.61	30
0.73	0.73	0.63	35
0.77	0.77	0.64	40
0.80	0.80	0.66	45
0.83	0.83	0.67	50
0.87	0.87	0.69	55
0.90	0.90	0.70	60
0.93	0.93	0.72	65
0.97	0.97	0.73	70
1.00	1.00	0.75	75
1.16	1.16	1.10	80
1.32	1.32	1.45	85
1.48	1.49	1.80	90
1.64	1.65	2.15	95
1.8	1.81	2.50	100



**Table 3: Zone group 02—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 431845 N:7260659	Groundwater level metres AHD Assessment site 2 E: 429751 N:7262940	Groundwater level metres AHD Assessment site 3 E: 433780 N:7258197	Announcement factor %
0.50	0.5	0.50	0
0.53	0.53	0.52	5
0.57	0.57	0.54	10
0.60	0.60	0.55	15
0.63	0.63	0.57	20
0.67	0.67	0.59	25
0.70	0.70	0.60	30
0.73	0.73	0.62	35
0.77	0.77	0.64	40
0.80	0.80	0.65	45
0.83	0.83	0.67	50
0.87	0.87	0.68	55
0.90	0.90	0.70	60
0.93	0.93	0.72	65
0.97	0.97	0.73	70
1.00	1.00	0.75	75
1.30	1.30	1.10	80
1.60	1.60	1.45	85
1.90	1.90	1.80	90
2.20	2.20	2.15	95
2.50	2.5	2.5	100

**Table 4: Zone group 03—announced entitlement decision table**

Groundwater level metres AHD assessment site 1 E: 426928 N:7261260	Groundwater level metres AHD assessment site 2 E: 427871 N:7258632	Groundwater level metres AHD assessment site 3 E: 425288 N: 7263243	Announcement factor %
2.03	3.17	2.14	0
2.22	3.35	2.32	5
2.40	3.53	2.51	10
2.59	3.71	2.69	15
2.77	3.89	2.87	20
2.96	4.07	3.06	25
3.14	4.25	3.24	30
3.33	4.43	3.42	35
3.51	4.61	3.60	40
3.70	4.79	3.79	45
3.88	4.97	3.97	50
4.07	5.15	4.15	55
4.25	5.33	4.34	60
4.44	5.51	4.52	65
4.62	5.69	4.70	70
4.80	5.87	4.89	75
5.34	6.77	5.18	80
5.88	7.68	5.47	85
6.42	8.58	5.75	90
6.96	9.49	6.04	95
7.50	10.39	6.33	100

**Table 5: Zone group 04—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 432260 N:7255144	Groundwater level metres AHD Assessment site 2 E: 428949 N:7256980	Groundwater level metres AHD Assessment site 3 E: 431586 N:7252268	Groundwater level metres AHD Assessment site 4 E: 429791 N:7254477	Announcement factor %
1.96	3.17	1.74	4.29	0
2.11	3.37	1.88	4.47	5
2.25	3.56	2.03	4.64	10
2.40	3.76	2.17	4.82	15
2.55	3.96	2.32	4.99	20
2.70	4.16	2.46	5.17	25
2.84	4.35	2.60	5.34	30
2.99	4.55	2.75	5.52	35
3.14	4.75	2.89	5.69	40
3.28	4.94	3.04	5.87	45
3.43	5.14	3.18	6.04	50
3.58	5.34	3.32	6.22	55
3.72	5.54	3.47	6.39	60
3.87	5.73	3.61	6.57	65
4.02	5.93	3.76	6.74	70
4.17	6.13	3.90	6.92	75
4.31	6.33	4.04	7.09	80
4.46	6.52	4.19	7.27	85
5.45	7.20	4.79	8.18	90
6.45	7.88	5.39	9.09	95
7.44	8.55	6.00	10	100

**Table 6: Zone group 05—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 431644 N:7250576	Groundwater level metres AHD Assessment site 2 E: 434400 N: 7252448	Announcement factor %
0.47	0.28	0
0.52	0.32	5
0.57	0.36	10
0.62	0.40	15
0.67	0.44	20
0.72	0.49	25
0.76	0.53	30
0.81	0.57	35
0.86	0.61	40
0.91	0.65	45
0.96	0.69	50
1.01	0.73	55
1.06	0.77	60
1.11	0.81	65
1.16	0.85	70
1.21	0.90	75
1.25	0.94	80
1.30	0.98	85
1.35	1.02	90
1.40	1.06	95
1.45	1.10	100

**Table 7: Zone group 06—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 421054 N:7264475	Groundwater level metres AHD Assessment site 2 E: 429036 N:7255882	Groundwater level metres AHD Assessment site 3 E: 428378 N:7253795	Groundwater level metres AHD Assessment site 4 E: 423722 N:7259229	Announcement factor %
8.16	3.91	6.77	8.34	0
8.28	4.08	6.84	8.97	5
8.41	4.25	6.91	9.61	10
8.53	4.43	6.97	10.24	15
8.65	4.60	7.04	10.87	20
8.77	4.77	7.11	11.51	25
8.90	4.94	7.18	12.14	30
9.02	5.11	7.25	12.77	35
9.14	5.29	7.31	13.40	40
9.26	5.46	7.38	14.04	45
9.39	5.63	7.45	14.67	50
9.51	5.80	7.52	15.30	55
9.63	5.97	7.59	15.94	60
9.76	6.15	7.65	16.57	65
9.88	6.32	7.72	17.20	70
10.00	6.49	7.79	17.84	75
10.29	6.66	8.25	18.66	80
10.58	6.83	8.70	19.49	85
10.86	7.01	9.16	20.32	90
11.15	8.01	9.61	21.15	95
11.44	9.02	10.07	21.98	100

**Table 8: Zone group 11—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 440553 N:7254309	Groundwater level metres AHD Assessment site 2 E: 442657 N:7257865	Groundwater level metres AHD Assessment site 3 E: 439732 N:7259920	Announcement factor %
1.72	0.5	0.5	0
1.80	0.56	0.53	5
1.89	0.63	0.56	10
1.97	0.69	0.59	15
2.05	0.76	0.62	20
2.14	0.82	0.65	25
2.22	0.88	0.68	30
2.30	0.95	0.71	35
2.38	1.01	0.74	40
2.47	1.08	0.77	45
2.55	1.14	0.81	50
2.63	1.20	0.84	55
2.72	1.27	0.87	60
2.80	1.33	0.90	65
2.93	1.53	1.04	70
3.07	1.74	1.18	75
3.21	1.94	1.32	80
3.34	2.14	1.47	85
3.48	2.35	1.61	90
3.61	2.55	1.75	95
3.75	2.75	1.90	100

**Table 9: Zone group 12—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 446153 N:7247803	Groundwater level metres AHD Assessment site 2 E: 446850 N:7249641	Groundwater level metres AHD Assessment site 3 E: 446451 N:7251622	Announcement factor %
2.21	1.25	0.71	0
2.46	1.41	0.79	5
2.70	1.57	0.86	10
2.95	1.73	0.94	15
3.19	1.89	1.02	20
3.44	2.05	1.10	25
3.68	2.21	1.17	30
3.93	2.37	1.25	35
4.17	2.54	1.33	40
4.42	2.70	1.40	45
4.66	2.86	1.48	50
4.91	3.02	1.56	55
5.15	3.18	1.63	60
5.40	3.34	1.71	65
5.64	3.50	1.79	70
6.03	3.83	1.99	75
6.43	4.17	2.19	80
6.82	4.50	2.39	85
7.21	4.83	2.59	90
7.61	5.17	2.80	95
8.00	5.50	3.00	100

**Table 10: Zone group 13—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 447190 N:7244744	Groundwater level metres AHD Assessment site 2 E: 445155 N:7242454	Groundwater level metres AHD Assessment site 3 E: 446044 N:7244002	Announcement factor %
0	1.24	1.58	0
0.17	1.44	1.70	5
0.35	1.64	1.82	10
0.52	1.84	1.94	15
0.70	2.04	2.06	20
0.87	2.24	2.18	25
1.05	2.44	2.29	30
1.22	2.64	2.41	35
1.39	2.84	2.53	40
1.57	3.04	2.65	45
1.74	3.24	2.77	50
1.92	3.43	2.89	55
2.09	3.63	3.01	60
2.27	3.83	3.13	65
2.44	4.03	3.25	70
2.77	4.23	3.60	75
3.10	4.43	3.95	80
3.42	4.63	4.29	85
3.75	4.83	4.64	90
4.08	5.03	4.99	95
4.41	5.23	5.34	100



**Table 11: Zone group 14—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 435645 N:7249961	Announcement factor %
0.00	0
0.13	5
0.25	10
0.38	15
0.50	20
0.63	25
0.75	30
0.88	35
1.00	40
1.13	45
1.25	50
1.38	55
1.50	60
1.63	65
1.75	70
1.88	75
2.00	80
2.13	85
2.25	90
2.38	95
2.50	100

**Table 12: Zone group 15—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 442615 N:7250695	Groundwater level metres AHD Assessment site 2 E: 440197 N:7249663	Groundwater level metres AHD Assessment site 3 E: 443414 N:7247770	Announcement factor %
2.96	2.85	2.99	0
3.26	3.10	3.12	5
3.56	3.34	3.25	10
3.87	3.59	3.37	15
4.17	3.83	3.50	20
4.47	4.08	3.63	25
4.77	4.32	3.76	30
5.07	4.57	3.88	35
5.38	4.81	4.01	40
5.68	5.06	4.14	45
5.98	5.30	4.27	50
6.28	5.55	4.39	55
6.58	5.79	4.52	60
6.89	6.04	4.65	65
7.19	6.28	4.78	70
7.49	6.53	4.90	75
8.38	6.93	5.79	80
9.27	7.33	6.68	85
10.15	7.73	7.57	90
11.04	8.13	8.46	95
11.93	8.53	9.35	100

**Table 13: Zone group 16—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 438423 N:7239681	Groundwater level metres AHD Assessment site 2 E: 439896 N:7242998	Groundwater level metres AHD Assessment site 3 E: 441509 N:7239387	Announcement factor %
6.5	5.32	3.25	0
6.65	5.52	3.52	5
6.79	5.72	3.78	10
6.94	5.92	4.05	15
7.09	6.12	4.31	20
7.24	6.32	4.58	25
7.38	6.52	4.85	30
7.53	6.72	5.11	35
7.68	6.92	5.38	40
7.82	7.12	5.64	45
7.97	7.32	5.91	50
8.12	7.52	6.18	55
8.27	7.72	6.44	60
8.41	7.92	6.71	65
8.56	8.12	6.97	70
8.71	8.32	7.24	75
8.85	8.52	7.51	80
9.00	8.73	7.78	85
9.85	9.49	8.22	90
10.69	10.25	8.66	95
11.54	11.00	9.09	100

**Table 14: Zone group 17—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 438532 N:7246885	Groundwater level metres AHD Assessment site 2 E: 435305 N:7246680	Groundwater level metres AHD Assessment site 3 E: 438616 N:7244930	Announcement factor %
3.80	4.27	5.21	0
3.98	4.38	5.34	5
4.16	4.49	5.47	10
4.35	4.59	5.60	15
4.53	4.70	5.73	20
4.71	4.81	5.86	25
4.89	4.92	5.99	30
5.07	5.03	6.12	35
5.26	5.13	6.26	40
5.44	5.24	6.39	45
5.62	5.35	6.52	50
5.80	5.46	6.65	55
5.98	5.57	6.78	60
6.17	5.68	6.91	65
6.35	5.78	7.04	70
6.53	5.89	7.17	75
7.12	6.00	7.90	80
7.71	6.48	8.63	85
8.31	6.95	9.37	90
8.90	7.43	10.10	95
9.49	7.91	10.83	100

**Table 15: Zone group 18—announced entitlement decision table**

Groundwater level metres AHD assessment site 1 E: 437291 N:7238271	Groundwater level metres AHD assessment site 2 E: 433168 N:7241383	Groundwater level metres AHD Assessment site 3 E: 435589 N:7240130	Announcement factor %
8.65	14.36	13.87	0
9.14	14.55	14.11	5
9.63	14.74	14.35	10
10.13	14.93	14.59	15
10.62	15.13	14.83	20
11.11	15.32	15.07	25
11.60	15.51	15.31	30
12.09	15.70	15.55	35
12.59	15.89	15.79	40
13.08	16.08	16.02	45
13.57	16.28	16.26	50
14.06	16.47	16.50	55
14.56	16.66	16.74	60
15.05	16.85	16.98	65
15.54	17.04	17.22	70
16.03	17.23	17.46	75
16.52	17.42	17.70	80
17.02	17.62	17.94	85
17.51	17.81	18.18	90
18.00	18.00	18.42	95
24.55	21.82	21.24	100

**Table 16: Zone group 21—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 434389 N:7234907	Groundwater level metres AHD Assessment site 2 E: 437520 N:7235813	Groundwater level metres AHD Assessment site 3 E: 440786 N:7237348	Announcement factor %
9.07	5.04	2.38	0
9.38	5.26	2.53	5
9.70	5.48	2.67	10
10.01	5.69	2.82	15
10.32	5.91	2.96	20
10.64	6.13	3.11	25
10.95	6.35	3.26	30
11.26	6.57	3.40	35
11.57	6.78	3.55	40
11.89	7.00	3.69	45
12.20	7.22	3.84	50
12.51	7.44	3.99	55
12.83	7.66	4.13	60
13.14	7.87	4.28	65
13.45	8.09	4.42	70
13.77	8.31	4.57	75
14.08	8.53	4.72	80
14.39	8.75	4.86	85
14.70	8.96	5.01	90
15.02	9.18	5.15	95
15.33	9.40	5.30	100

**Table 17: Zone group 22—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 444202 N:7233858	Groundwater level metres AHD Assessment site 2 E: 442084 N:7236347	Groundwater level metres AHD Assessment site 3 E: 438193 N:7234290	Announcement factor %
7	4.25	7.67	0
7.24	4.77	7.79	5
7.47	5.28	7.92	10
7.71	5.80	8.04	15
7.94	6.32	8.16	20
8.18	6.83	8.29	25
8.41	7.35	8.41	30
8.65	7.87	8.53	35
8.88	8.38	8.65	40
9.12	8.90	8.78	45
9.35	9.42	8.90	50
9.59	9.93	9.02	55
9.82	10.45	9.15	60
10.06	10.96	9.27	65
10.29	11.48	9.39	70
10.53	12.00	9.51	75
10.76	12.51	9.63	80
11.00	13.03	10.35	85
11.97	13.55	11.07	90
12.94	14.06	11.78	95
13.91	14.58	12.50	100

**Table 18: Zone group 23—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 452526 N:7222669	Announcement factor %
2.01	0
2.06	5
2.11	10
2.16	15
2.21	20
2.26	25
2.31	30
2.36	35
2.41	40
2.46	45
2.51	50
2.56	55
2.61	60
2.66	65
2.71	70
2.76	75
2.81	80
2.86	85
2.91	90
2.96	95
3.01	100



**Table 19: Zone group 24—announced entitlement decision table**

<b>Groundwater level metres AHD Assessment site 1 E: 438193 N:7234290</b>	<b>Announcement factor %</b>
7.67	0
7.76	5
7.84	10
7.93	15
8.02	20
8.10	25
8.19	30
8.28	35
8.36	40
8.45	45
8.54	50
8.62	55
8.71	60
8.80	65
8.88	70
8.97	75
9.74	80
10.52	85
11.29	90
12.07	95
12.84	100

**Table 20: Zone group 36—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 426640 N:7263852	Groundwater level metres AHD Assessment site 2 E: 425850 N:7265274	Groundwater level metres AHD Assessment site 3 E: 426210 N:7262098	Announcement factor %
-4.00	-3.00	-2.63	0
-3.65	-2.75	-2.35	5
-3.29	-2.50	-2.07	10
-2.94	-2.25	-1.79	15
-2.58	-2.00	-1.50	20
-2.23	-1.75	-1.22	25
-1.87	-1.50	-0.94	30
-1.52	-1.25	-0.66	35
-1.16	-1.00	-0.38	40
-0.81	-0.75	-0.10	45
-0.45	-0.50	0.19	50
-0.10	-0.25	0.47	55
0.26	0.00	0.75	60
0.61	0.25	1.03	65
0.95	0.50	1.31	70
1.29	0.75	1.59	75
1.63	1.00	1.87	80
1.98	1.25	2.16	85
2.32	1.50	2.44	90
2.66	1.75	2.72	95
3.00	2.00	3.00	100

**Table 21: Zone group 38—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 442615 N:7250695	Groundwater level metres AHD Assessment site 2 E: 440363 N:7252380	Groundwater level metres AHD Assessment site 3 E: 443414 N:7247770	Announcement factor %
0.00	0.55	1.22	0
0.39	0.76	1.51	5
0.78	0.97	1.79	10
1.17	1.18	2.08	15
1.56	1.39	2.37	20
1.94	1.61	2.65	25
2.33	1.82	2.94	30
2.72	2.03	3.23	35
3.11	2.24	3.51	40
3.50	2.45	3.80	45
3.89	2.66	4.09	50
4.28	2.87	4.37	55
4.67	3.08	4.66	60
5.05	3.29	4.95	65
5.44	3.50	5.23	70
5.83	3.72	5.52	75
6.22	3.93	5.81	80
6.61	4.14	6.09	85
7.00	4.35	6.38	90
8.00	4.56	7.88	95
9.00	4.77	9.38	100

**Table 22: Zone group 39— announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 441503 N:7239390	Groundwater level metres AHD Assessment site 2 E: 441297 N:7241231	Groundwater level metres AHD Assessment site 3 E: 440886 N:7244089	Announcement factor %
3.39	3.49	4.55	0
3.61	3.73	4.73	5
3.82	3.96	4.91	10
4.04	4.20	5.09	15
4.26	4.44	5.28	20
4.47	4.68	5.46	25
4.69	4.91	5.64	30
4.90	5.15	5.82	35
5.12	5.39	6.00	40
5.34	5.63	6.18	45
5.55	5.86	6.37	50
5.77	6.10	6.55	55
5.99	6.34	6.73	60
6.20	6.58	6.91	65
6.42	6.81	7.09	70
6.63	7.05	7.27	75
6.85	7.29	7.46	80
7.38	7.90	8.19	85
7.91	8.51	8.93	90
8.43	9.13	9.67	95
8.96	9.74	10.41	100

**Table 23: Zone group 40—announced entitlement decision table**

Groundwater level metres AHD assessment site 1 E: 440344 N:7235884	Groundwater level metres AHD assessment site 2 E: 440015 N:7234795	Groundwater level metres AHD assessment site 3 E: 440254 N:7233932	Announcement factor %
3.12	2.46	2.53	0
3.43	2.87	3.00	5
3.74	3.28	3.47	10
4.05	3.69	3.93	15
4.36	4.10	4.40	20
4.67	4.51	4.87	25
4.97	4.92	5.34	30
5.28	5.33	5.81	35
5.59	5.74	6.27	40
5.90	6.15	6.74	45
6.21	6.57	7.21	50
6.52	6.98	7.68	55
6.83	7.39	8.15	60
7.14	7.80	8.61	65
7.45	8.21	9.08	70
7.76	8.62	9.55	75
8.06	9.03	10.02	80
8.37	9.44	10.49	85
8.68	9.85	10.95	90
8.99	10.26	11.42	95
9.30	10.67	11.89	100

**Table 24: Zone group 41—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 437452 N:7234104	Groundwater level metres AHD Assessment site 2 E: 438328 N:7233492	Announcement factor %
7.03	7.88	0
7.26	8.19	5
7.48	8.50	10
7.71	8.80	15
7.94	9.11	20
8.16	9.42	25
8.39	9.73	30
8.62	10.03	35
8.84	10.34	40
9.07	10.65	45
9.30	10.96	50
9.52	11.26	55
9.75	11.57	60
9.97	11.88	65
10.20	12.19	70
10.43	12.49	75
10.65	12.80	80
10.88	13.11	85
11.11	13.42	90
11.33	13.72	95
11.56	14.03	100

# Attachment 3 Coastal Burnett groundwater management area: Water licence announced entitlement decision tables

Assessment site geographical locations in this attachment are stated in eastings (E) and northings (N) as Map Grid of Australia 1994 (MGA94) zone 56 coordinates.

**Table 1: Index of announced entitlement decision tables**

Zone Group	Zones	Table number
ZG07	021	2
ZG08	022	3
ZG09	023	4
ZG10	024	5
ZG19	061	6
ZG20	062	7
ZG25	069	8
ZG26	070	9
ZG27	071	10
ZG29	073	11
ZG30	074	12
ZG31	075	13
ZG32	076	14
ZG33	077	15
ZG34	078	16
ZG43	097	17
ZG45	099	18
ZG46	100	19

**Table 2: Zone group 07—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 416252 N: 7262861	Groundwater level metres AHD Assessment site 2 E: 417179 N: 7264371	Groundwater level metres AHD Assessment site 3 E: 417365 N: 7261858	Announcement factor %
0.00	0.00	0.00	0
0.12	0.11	0.12	5
0.24	0.21	0.24	10
0.36	0.32	0.36	15
0.48	0.42	0.48	20
0.60	0.53	0.60	25
0.72	0.63	0.72	30
0.84	0.74	0.84	35
0.96	0.84	0.96	40
1.08	0.95	1.08	45
1.20	1.05	1.20	50
1.32	1.16	1.32	55
1.44	1.26	1.44	60
1.56	1.37	1.56	65
1.68	1.47	1.68	70
1.80	1.58	1.80	75
1.92	1.68	1.92	80
2.04	1.79	2.04	85
2.16	1.89	2.16	90
2.28	2.00	2.28	95
2.40	2.10	2.40	100



**Table 3: Zone group 08—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 419637 N:7256444	Groundwater level metres AHD Assessment site 2 E: 418995 N:7258090	Announcement factor %
19.62	12.67	0
20.28	13.50	5
20.93	14.33	10
21.59	15.16	15
22.24	15.99	20
22.90	16.82	25
23.55	17.65	30
24.21	18.48	35
24.86	19.31	40
25.52	20.14	45
26.17	20.97	50
26.83	21.80	55
27.48	22.63	60
28.14	23.46	65
28.79	24.29	70
29.45	25.12	75
30.10	25.95	80
30.76	26.78	85
31.41	27.61	90
32.07	28.44	95
32.72	29.27	100

**Table 4: Zone group 09—announced entitlement decision table**

Groundwater level metres AHD assessment site 1 E: 425807 N: 7249554	Groundwater level metres AHD assessment site 2 E: 426311 N:7251112	Announcement factor %
3.53	2.84	0
3.74	2.92	5
3.95	3.01	10
4.17	3.09	15
4.38	3.17	20
4.59	3.26	25
4.80	3.34	30
5.01	3.42	35
5.23	3.50	40
5.44	3.59	45
5.65	3.67	50
5.86	3.75	55
6.07	3.84	60
6.29	3.92	65
6.50	4.00	70
7.00	4.16	75
7.50	4.32	80
8.00	4.48	85
8.50	4.64	90
9.00	4.80	95
9.50	4.96	100

**Table 5: Zone group 10—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 417282 N:7243758	Groundwater level metres AHD Assessment site 2 E: 413884 N:7243245	Groundwater level metres AHD Assessment site 3 E: 419231 N:7245428	Announcement factor %
39.99	42.81	35.75	0
40.44	43.40	36.18	5
40.89	43.99	36.62	10
41.34	44.58	37.05	15
41.78	45.17	37.48	20
42.23	45.76	37.91	25
42.68	46.35	38.35	30
43.13	46.94	38.78	35
43.58	47.53	39.21	40
44.03	48.12	39.64	45
44.48	48.71	40.08	50
44.92	49.29	40.51	55
45.37	49.88	40.94	60
45.82	50.47	41.37	65
46.27	51.06	41.81	70
46.72	51.65	42.24	75
47.17	52.24	42.67	80
47.61	52.83	43.10	85
48.06	53.42	43.54	90
48.51	54.01	43.97	95
48.96	54.60	44.40	100

**Table 6: Zone group 19—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 426258 N:7241438	Groundwater level metres AHD Assessment site 2 E: 426956 N:7242627	Groundwater level metres AHD Assessment site 3 E: 428145 N:7243710	Announcement factor %
23.50	28.18	23.40	0
23.91	28.52	23.73	5
24.31	28.87	24.07	10
24.72	29.21	24.40	15
25.12	29.56	24.74	20
25.53	29.90	25.07	25
25.94	30.24	25.41	30
26.34	30.59	25.74	35
26.75	30.93	26.08	40
27.15	31.28	26.41	45
27.56	31.62	26.75	50
27.97	31.96	27.08	55
28.37	32.31	27.42	60
28.78	32.65	27.75	65
29.18	33.00	28.09	70
29.59	33.34	28.42	75
30.00	33.68	28.75	80
31.17	34.51	29.94	85
32.34	35.34	31.13	90
33.51	36.16	32.31	95
34.68	36.99	33.55	100

**Table 7: Zone group 20—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 432331 N:7236579	Groundwater level metres AHD Assessment site 2 E: 428379 N:7240320	Announcement factor %
16.95	27.70	0
17.42	27.93	5
17.90	28.16	10
18.37	28.39	15
18.84	28.62	20
19.32	28.85	25
19.79	29.08	30
20.26	29.31	35
20.74	29.54	40
21.21	29.77	45
21.68	30.00	50
22.15	30.60	55
22.63	31.21	60
23.10	31.81	65
23.57	32.42	70
24.05	33.02	75
24.52	33.62	80
24.99	34.23	85
25.46	34.83	90
25.94	35.44	95
26.41	36.04	100

**Table 8: Zone group 25—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 452526 N:7222669	Announcement factor %
2.01	0
2.06	5
2.11	10
2.16	15
2.21	20
2.26	25
2.31	30
2.36	35
2.41	40
2.46	45
2.51	50
2.56	55
2.61	60
2.66	65
2.71	70
2.76	75
2.81	80
2.86	85
2.91	90
2.96	95
3.01	100

**Table 9: Zone group 26—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 434366 N:7224716	Announcement factor %
36.55	0
36.94	5
37.33	10
37.72	15
38.11	20
38.50	25
38.89	30
39.28	35
39.67	40
40.06	45
40.45	50
40.84	55
41.23	60
41.62	65
42.01	70
42.40	75
42.79	80
43.18	85
43.57	90
43.96	95
44.35	100

**Table 10: Zone group 27—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 432532 N:7226181	Announcement factor %
25.02	0
25.25	5
25.48	10
25.71	15
25.95	20
26.18	25
26.41	30
26.64	35
26.87	40
27.10	45
27.34	50
27.57	55
27.80	60
28.03	65
28.26	70
28.49	75
28.72	80
28.96	85
29.19	90
29.42	95
29.65	100



**Table 11: Zone group 29—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 429569 N:7226924	Announcement factor %
33.33	0
33.45	5
33.58	10
33.70	15
33.82	20
33.94	25
34.07	30
34.19	35
34.31	40
34.43	45
34.56	50
34.68	55
34.80	60
34.92	65
35.05	70
35.17	75
35.29	80
35.41	85
35.54	90
35.66	95
35.78	100

**Table 12: Zone Group 30—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 427812 N:7230670	Groundwater level metres AHD Assessment site 2 E: 432714 N:7235424	Announcement factor %
50.00	20.00	0
50.27	20.30	5
50.54	20.60	10
50.81	20.90	15
51.08	21.20	20
51.35	21.50	25
51.61	21.80	30
51.88	22.10	35
52.15	22.40	40
52.42	22.70	45
52.69	23.00	50
52.96	23.30	55
53.23	23.60	60
53.50	23.90	65
53.77	24.20	70
54.04	24.50	75
54.30	24.80	80
54.57	25.10	85
54.84	25.40	90
55.11	25.70	95
55.38	26.00	100

**Table 13: Zone group 31—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 424002 N:7227919	Groundwater level metres AHD Assessment site 2 E: 425880 N:7229349	Announcement factor %
59.35	53.03	0
59.73	53.36	5
60.10	53.69	10
60.48	54.02	15
60.86	54.35	20
61.23	54.69	25
61.61	55.02	30
61.99	55.35	35
62.36	55.68	40
62.74	56.01	45
63.12	56.34	50
63.49	56.67	55
63.87	57.00	60
64.25	57.33	65
64.62	57.66	70
65.00	58.00	75
65.77	59.08	80
66.54	60.15	85
67.30	61.23	90
68.07	62.30	95
68.84	63.38	100

**Table 14: Zone group 32—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 422683 N:7227766	Groundwater level metres AHD Assessment site 2 E: 422335 N:7228666	Announcement factor %
62.35	62.69	0
62.97	63.01	5
63.59	63.32	10
64.21	63.64	15
64.84	63.95	20
65.46	64.27	25
66.08	64.58	30
66.70	64.90	35
67.32	65.21	40
67.94	65.53	45
68.57	65.85	50
69.19	66.16	55
69.81	66.48	60
70.43	66.79	65
71.05	67.11	70
71.67	67.42	75
72.29	67.74	80
72.92	68.05	85
73.54	68.37	90
74.16	68.68	95
74.78	69.00	100

**Table 15: Zone group 33—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 426600 N:7225127	Groundwater level metres AHD Assessment site 2 E: 426456 N:7223997	Announcement factor %
44.69	53.95	0
45.26	54.15	5
45.84	54.35	10
46.41	54.55	15
46.98	54.76	20
47.56	54.96	25
48.13	55.16	30
48.70	55.36	35
49.27	55.56	40
49.85	55.76	45
50.42	55.97	50
50.99	56.17	55
51.57	56.37	60
52.14	56.57	65
52.71	56.77	70
53.29	56.97	75
53.86	57.17	80
54.43	57.38	85
55.00	57.58	90
55.58	57.78	95
56.15	57.98	100

**Table 16: Zone group 34—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 426457 N:7221699	Groundwater level metres AHD Assessment site 2 E: 425269 N:7219545	Announcement factor %
65.51	70.15	0
66.13	70.63	5
66.75	71.11	10
67.38	71.60	15
68.00	72.08	20
68.62	72.56	25
69.24	73.04	30
69.86	73.52	35
70.49	74.01	40
71.11	74.49	45
71.73	74.97	50
72.35	75.45	55
72.97	75.93	60
73.60	76.42	65
74.22	76.90	70
74.84	77.38	75
75.46	77.86	80
76.08	78.34	85
76.71	78.83	90
77.33	79.31	95
77.95	79.79	100

**Table 17: Zone group 43—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 433362 N:7227586	Announcement factor %
20.00	0
20.42	5
20.84	10
21.26	15
21.68	20
22.10	25
22.52	30
22.94	35
23.36	40
23.78	45
24.20	50
24.61	55
25.03	60
25.45	65
25.87	70
26.29	75
26.71	80
27.13	85
27.55	90
27.97	95
28.39	100

**Table 18: Zone group 45—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 431621 N:7226358	Announcement factor %
25.85	0
25.99	5
26.14	10
26.28	15
26.43	20
26.57	25
26.72	30
26.86	35
27.01	40
27.15	45
27.30	50
27.44	55
27.58	60
27.73	65
27.87	70
28.02	75
28.16	80
28.31	85
28.45	90
28.60	95
28.74	100



**Table 19: Zone group 46—announced entitlement decision table**

Groundwater level metres AHD Assessment site 1 E: 429618 N:7223006	Groundwater level metres AHD Assessment site 2 E: 429210 N:7224026	Announcement factor %
32.40	32.83	0
33.13	33.43	5
33.85	34.04	10
34.58	34.64	15
35.30	35.25	20
36.03	35.85	25
36.75	36.46	30
37.48	37.06	35
38.20	37.67	40
38.93	38.27	45
39.65	38.87	50
40.38	39.48	55
41.10	40.08	60
41.83	40.69	65
42.55	41.29	70
43.28	41.90	75
44.00	42.50	80
45.12	43.57	85
46.25	44.64	90
47.37	45.71	95
48.49	46.78	100

## Attachment 4 Barambah Creek groundwater sub-areas



