

# **Pioneer Valley**

## **Water Management Protocol**

**October 2019**

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# Contents

<b>Chapter 1</b>	<b>Preliminary</b> .....	<b>1</b>
1	Short title.....	1
2	Commencement of the water management protocol .....	1
3	Purpose of protocol.....	1
4	Interpretation of words used in this protocol.....	1
5	Area to which this protocol applies .....	1
6	Water to which this protocol applies .....	1
7	Information about areas and zones .....	1
<b>Chapter 2</b>	<b>Unallocated water</b> .....	<b>2</b>
8	Scope of chapter 2.....	2
9	Record of volume of unallocated water .....	2
10	Volumes of unallocated water held in reserve.....	2
11	Process for releasing unallocated water.....	2
<b>Chapter 3</b>	<b>Supplemented water allocation dealing rules</b> .....	<b>3</b>
12	Scope of chapter 3.....	3
13	Definitions for this chapter .....	3
Division 1	Permitted changes .....	3
14	Subdivision and amalgamations.....	3
15	Location .....	3
16	Purpose .....	4
Division 2	Prohibited changes .....	5
17	Location .....	5
18	Priority group .....	5
Division 3	Assessed changes .....	5
19	Assessed changes.....	5
<b>Chapter 4</b>	<b>Pioneer River Water Management Area</b> .....	<b>6</b>
20	Scope of chapter 4.....	6
Part 1	Water sharing rules .....	6
21	Announced period.....	6
22	Water allocation holder data collection and transfer .....	6
Part 2	Dealing with water allocations.....	6
Division 1	Permitted changes .....	6
23	Subdivision and amalgamations.....	6
24	Purpose .....	7
Division 2	Prohibited changes .....	7
25	Subdivision and amalgamations.....	7

26	Location .....	7
Part 3	Seasonal water assignment rules .....	7
27	Seasonal water assignment rules.....	7
<b>Chapter 5</b>	<b>Pioneer Groundwater Management Area .....</b>	<b>8</b>
28	Scope of chapter 4.....	8
Part 1	Water sharing rules .....	8
Division 1	Underground water allocations .....	8
29	Taking water under a water allocation.....	8
30	Announced allocation .....	8
31	Announced allocation calculation .....	8
32	Seawater intrusion adjustment .....	9
Division 2	Underground water licences .....	10
Subdivision 1	Zone 17A.....	10
33	Taking water under a water licence.....	10
34	Announced entitlement.....	10
35	Announced entitlement calculation.....	11
Subdivision 2	Zones 15AS, 15BS, 15BAS, 15CS, 15DS, 16S and 17S .....	11
36	Taking water under a water licence.....	11
37	Announced entitlement.....	11
38	Annual entitlement calculation.....	12
Subdivision 3	Zones 11A, 11B, 12A, 12B, 13A, 13B, 15A, 15B, 15BA and 15C .....	12
39	Announced entitlement.....	12
Part 2	Dealing with water allocations.....	13
Division 1	Permitted changes .....	13
40	Subdivisions or amalgamations.....	13
41	Purpose .....	13
42	Location .....	13
Division 2	Prohibited changes .....	15
43	Water allocation group.....	15
44	Location .....	15
Division 3	Assessed changes .....	15
45	Location .....	15
Part 3	Seasonal water assignment rules .....	16
Division 1	Water allocations.....	16
46	Seasonal water assignment rules.....	16
Division 2	Water licences.....	17
47	Seasonal water assignment rules for licences in seawater intruded zones.....	17
48	Seasonal water assignment rules for other licences .....	17
<b>Chapter 6</b>	<b>Monitoring and reporting .....</b>	<b>18</b>

Part 1	Monitoring.....	18
49	Water monitoring .....	18
50	Natural ecosystems monitoring .....	18
Part 2	Assessment and reporting .....	18
51	Assessment .....	18
52	Periodical report on seawater intrusion .....	18
<b>Attachment 1</b>	<b>Dictionary .....</b>	<b>19</b>
<b>Attachment 2</b>	<b>Announced allocation decision tables for underground water allocations..</b>	<b>20</b>

# Chapter 1 Preliminary

## 1 Short title

- (1) This water management protocol may be cited as the Pioneer Valley Water Management Protocol.
- (2) Reference in this document to ‘this protocol’ means the Pioneer Valley Water Management Protocol.

## 2 Commencement of the water management protocol

- (1) This protocol commenced on 6 December 2016.
- (2) Subsection (1) does not apply for sections 36 to 39.
- (3) For subsection (2) the commencement date is 1 July 2015.

## 3 Purpose of protocol

This protocol implements the Water Plan (Pioneer Valley) 2002 (the Water Plan).

## 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 the area defined in schedule 1 of the Water Plan.

## 6 Water to which this protocol applies

This protocol applies to the management of the following water in the plan area–

- (a) water in a watercourse, lake or spring (surface water), and
- (b) underground water.

## 7 Information about areas and zones

- (1) The location of the boundaries of the plan area, water management areas, sub-areas and zones are held in digital electronic form by the department.
- (2) The information held in digital electronic form can be reduced or enlarged to show the details of the boundaries<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.

## Chapter 2 Unallocated water

### 8 Scope of chapter 2

This chapter states the process for making available and dealing with unallocated water mentioned in Part 5 of the Water Plan.

### 9 Record of volume of unallocated water

The chief executive may keep a register of the volume of unallocated water available.

### 10 Volumes of unallocated water held in reserve

- (1) The total of the annual volumetric limits for all water entitlements to take unallocated water from subcatchments 1- 8 is 10 500ML.
- (2) The total of the nominal entitlements for all water licences to take unallocated water from subcatchment 12 is 4 000ML.
- (3) The total of the annual volumetric limits for all water entitlements to take unallocated water from subcatchments 9-11 is 0ML.

### 11 Process for releasing unallocated water

The process for releasing unallocated water must be in accordance with the requirements prescribed in part 2, division 2 of the Water Regulation 2016.

# Chapter 3      Supplemented water allocation dealing rules

## 12      Scope of chapter 3

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

## 13      Definitions for this chapter

In this chapter—

**Zone groups and zones in each zone group** for the Pioneer River Water Supply Scheme are identified in Table 1.

Table 1: Zone groups in the Pioneer River Water Supply Scheme

	Zone group	
	Upper Pioneer	Lower Pioneer
Zones in the zone group	Teemburra 01 Cattle 01 Cattle 02 Silver McGregor 01 Pioneer 03 Pioneer 04	Pioneer 01 Pioneer 02 Bakers 01

## Division 1      Permitted changes

### 14      Subdivision and amalgamations

- (1) Subdivision of a water allocation is permitted where the location and priority group of the new water allocations is the same as that of the water allocation that is being subdivided.
- (2) Amalgamation of water allocations is permitted where the location and priority group of water allocations that are being amalgamated and the new water allocation are the same.

### 15      Location

- (1) A change to the location for the taking of water under a water allocation in the Pioneer River Water Supply Scheme is permitted provided the change would not result in a total nominal volume in a zone or zone group that—
  - (a) exceeds the maximum total nominal volume for a zone or zone group for a priority group, or
  - (b) is less than the minimum total nominal volume for a zone or zone group for a priority group.
- (2) For this section, the maximum and minimum total nominal volumes of high class A priority group water and high class B priority group water for each zone and for each zone group for the Pioneer River Water Supply Scheme are identified in Table 2.
- (3) For this section, the total nominal volume in a zone or zone group is the total nominal volume of all water allocations of the same priority group—



- (a) for the zone or zone group, and
- (b) for which relevant valid change certificates have been issued under section 159 of the *Water Act 2000*.

Table 2: Permitted distributions in the Pioneer River Water Supply Scheme

	High class A priority group water allocations		High class B priority group water allocations	
	Minimum total nominal volume (ML)	Maximum total nominal volume (ML)	Minimum total nominal volume (ML)	Maximum total nominal volume (ML)
<b>Zone group</b>				
Upper Pioneer	0	5 000	26 250	33 750
Lower Pioneer	26 500	31 000	13 150	20 650
<b>Zone</b>				
Teemburra 01	0	475	500	6 100
Cattle 01	0	480	1 750	8 800
Cattle 02	0	310	0	4 300
Silver McGregor 01	0	0	2 000	6 000
Pioneer 04	0	250	50	4 400
Pioneer 03	0	4 500	850	11 500
Pioneer 02	500	12 600	0	14 700
Pioneer 01	18 000	30 400	0	17 700
Bakers 01	0	0	3 000	6 000

## 16 Purpose

A change to the purpose of a water allocation is permitted where the change results in the purpose being 'rural' or 'any'.

## Division 2 Prohibited changes

### 17 Location

A change to the location for a water allocation is prohibited—

- (a) in the Pioneer River Water Supply Scheme if the change—
  - (i) would result in the total nominal volume in a zone or zone group that is greater than the maximum volumes or lesser than the minimum volumes in table 2
  - (ii) is to a location that is not a zone listed in table 1.
- (b) if the change is to or from zone Eton 01.

### 18 Priority group

A change to a priority group for a water allocation is prohibited—

- (a) if the change is to or from a risk priority group, or
- (b) to a priority group that is not specified in the Water Plan.

## Division 3 Assessed changes

### 19 Assessed changes

- (1) The holder of a water allocation that states the purpose as 'distribution loss' may apply to the chief executive under section 72 of the Water Regulation 2016 to change the purpose of the water allocation to 'any'.
- (2) 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.

# Chapter 4 Pioneer River Water Management Area

## 20 Scope of chapter 4

This chapter applies to all unsupplemented water allocations located within the Pioneer River Water Management Area.

## Part 1 Water sharing rules

### 21 Announced period

- (1) Water may only be taken under a water allocation with flow conditions during an announced period.
- (2) The chief executive must develop procedures for determining the start and finish of an announced period during which the stream flow exceeds the access flow conditions specified for the water allocation.
- (3) The chief executive must notify holders of water allocations with flow conditions of—
  - (a) the start and end of an announced period, or
  - (b) the conditions under which an announced period starts and ends.

### 22 Water allocation holder data collection and transfer

- (1) For water taken during an announced period, it is a condition of a water allocation that a water allocation holder and any assignee must collect and record meter readings—
  - (a) at the start of taking water, and
  - (b) at the end of taking water.
- (2) The water allocation holder and any assignee must transfer the data collected under subsection 1 to the chief executive on a quarterly basis.

## Part 2 Dealing with water allocations

### Division 1 Permitted changes

#### 23 Subdivision and amalgamations

- (1) The subdivision of a water allocation into two or more water allocations is permitted where—
  - (a) the new water allocations have the same flow conditions and location, and
  - (b) the nominal volume, annual volumetric limit and maximum rate of take of each of the new water allocations is in the same proportion as the nominal volume, annual volumetric limit and maximum rate of take of the water allocation that is being subdivided
- (2) two or more water allocations may be amalgamated into a new water allocation where the water allocations have the same flow conditions and location.

**24 Purpose**

A change to the purpose of a water allocation is permitted where the change results in the purpose being 'rural' or 'any'.

## **Division 2 Prohibited changes**

**25 Subdivision and amalgamations**

The subdivision or amalgamation is prohibited where the water allocations do not have the same flow condition and location.

**26 Location**

The change to the location is prohibited if the change is to—

- (a) zone Teemburra 01
- (b) zone Eton 01, or
- (c) zone Bakers 01.

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

**27 Seasonal water assignment rules**

The chief executive may approve a seasonal assignment of a water allocation for unsupplemented water where—

- (a) there is no change to the location for the take of water under a seasonal assignment
- (b) the flow condition under which water may be taken under a seasonal assignment is the same as the flow condition for the water allocation that is being seasonally assigned, and
- (c) if the volume of the seasonal assignment is—
  - (i) less than the volumetric limit of the water allocation—the maximum rate of take for the seasonal assignment is in proportion to the volume of water that is being seasonally assigned, or
  - (ii) equal to the volumetric limit of the water allocation—the maximum rate of take for the seasonal assignment is the rate of take for the water allocation that is being seasonally assigned.

# Chapter 5 Pioneer Groundwater Management Area

## 28 Scope of chapter 4

This chapter applies to underground water entitlements within the Pioneer Groundwater Management Area.

## Part 1 Water sharing rules

### Division 1 Underground water allocations

#### 29 Taking water under a water allocation

- (1) The volume of water taken under a water allocation in a water year must not exceed the annual volumetric limit of the water allocation multiplied by the announced allocation.
- (2) Despite subsection 1, water is prohibited from being taken under a water allocation with a water allocation group of 11, 12, 13, 15 or 16 if the electrical conductivity of the water taken would be greater than 1 500 microsiemens per centimetre ( $\mu\text{S}/\text{cm}$ ).
- (3) Subsection 2 does not apply—
  - (a) if the chief executive is satisfied that an electrical conductivity reading greater than 1 500  $\mu\text{S}/\text{cm}$  is unrelated to the intrusion of seawater, or
  - (b) to the extent that the water taken is for public health purposes.

#### 30 Announced allocation

The chief executive must—

- (a) set an announced allocation for water allocations located within each zone to take effect on the first day of each water year;
- (b) recalculate the announced allocation for each zone following a significant recharge event if the current announced allocation is less than 100 per cent
- (c) reset the announced allocation for a zone only if a recalculation indicates that the announced allocation would—
  - (i) increase by five or more percentage points, or
  - (ii) increase to 100 per cent, and
- (d) make public details of the announced allocation, including parameters for determining the announced allocation, on the department's internet site within five business days of setting or resetting an announced allocation.

#### 31 Announced allocation calculation

- (1) This section applies to water allocations belonging to water allocation groups 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16.
- (2) For each zone, the announced allocation for water allocations in that zone must be calculated, using the decision table for that zone, as follows—

- (a) determine the groundwater level for each assessment site in the zone
  - (b) for groundwater levels that are equal to, or above the reference level stated in column 4 of the decision table—the announced allocation factor for that site is 100 per cent
  - (c) for groundwater levels that are equal to or less than the reference level stated in column 5 of the decision table—the announced allocation factor for that site is 0 per cent
  - (d) for groundwater levels that are between the reference levels stated in columns 4 and 5 of the decision table—the announced allocation factor for that site must be linearly interpolated between 0% and 100% where—
    - (i) 0 per cent is represented by the level stated in column 5 of the decision table, and
    - (ii) 100 per cent is represented by the level stated in column 4 of the decision table.
  - (e) average the announced allocation factors for the assessment site(s) for the zone and round the result to the nearest five percent, and
  - (f) apply any applicable seawater intrusion adjustment as determined under section 32.
- (3) If the monitoring bore for the assessment site cannot be used, the chief executive may use another method of determining the groundwater level for the site.
- (4) In this section—

**announced allocation factor** means the value representing available storage for a particular assessment site.

**decision table** refers to tables 7 through 40 in attachment 2.

## 32 Seawater intrusion adjustment

- (1) This section applies to water allocations with a water allocation group of 11, 12, 13, 15 and 16.
- (2) For each zone mentioned in table 3 column 5 or 6, the seawater intrusion adjustment to the announced allocation for water allocations in that zone must be determined as follows—
  - (a) determine the electrical conductivity at the assessment sites listed in table 3, column ;
  - (b) where the EC for an assessment site mentioned in table 3 column 1 exceeds the threshold stated in column 4, the seawater intrusion adjustment for a zone mentioned in—
    - (i) column 5—is minus 30 per cent; if a seawater intrusion adjustment has been in place for that zone for 12 months or more, otherwise minus 15 percent, and
    - (ii) column 6—is minus 20 per cent; if a seawater intrusion adjustment has been in place for that zone for 12 months or more, otherwise minus 10 percent.
- (3) If the monitoring bore for the assessment site cannot be used, the chief executive may use another method of determining the electrical conductivity for the site.
- (4) If more than one adjustment is calculated for a zone, the largest adjustment applies.
- (5) Subsection 2(b) does not apply where the chief executive is satisfied that an electrical conductivity reading determined under subsection 2(a) is not representative of an increase in seawater intrusion for a zone.

Table 3: Announced allocation adjustment – Electrical conductivity (EC) measurement sites and thresholds

Column 1 Assessment site number	Column 2 Location		Column 3 Bore registered number	Column 4 EC threshold (µS/cm)	Column 5 Primary adjustment zone(s)	Column 6 Secondary adjustment zone(s)
	Eastings	Northings				
Site 1	718011	7646827	12600223	800	13B	-
Site 2	721436	7661298	12500274	800	15A	-
Site 3	721398	7659687	12500498	1 350	15B	12A
Site 4	723465	7659574	12500273	850	15B	12A
Site 5	725927	7659239	12500275	1 200	15B	12A
Site 6	721332	7653551	12600074	1 000	15BA	11A, 12B
Site 7	723059	7654585	12600075	1 200	15BA	11A, 12B
Site 8	720015	7654293	12600507	1 350	15BA	11A, 12B
Site 9	723331	7655799	12600592	1 200	15BA	11A, 12B
Site 10	719900	7652366	12600473	1 350	15C	13A, 13B
Site 11	724241	7648758	12600231	1 300	15C	13A, 13B
Site 12	720533	7651416	12600533	900	15C	13A, 13B
Site 13	723384	7651169	12600515	1 350	15C	13A, 13B
Site 14	720637	7647918	12600579	1 350	15C	13A, 13B
Site 15	718734	7644787	12600497	1 500	15D	16
Site 16	723853	7643792	12600577	900	16	-
Site 17	722476	7637999	12600271	1 500	17A	-
Site 18	721734	7638502	12600286	1 350	17A	-

## Division 2 Underground water licences

### Subdivision 1 Zone 17A

#### 33 Taking water under a water licence

- (1) The volume of water taken under a water licence in a water year must not exceed the nominal entitlement of the water licence multiplied by the announced entitlement.
- (2) Despite subsection 1, water is prohibited from being taken under a water licence if the electrical conductivity of the water taken would be greater than 1 500 µS/cm.
- (3) Subsection 2 does not apply—
  - (a) if the chief executive is satisfied that electrical conductivity greater than 1 500 µS/cm is unrelated to the intrusion of seawater, or
  - (b) to the extent that the water taken is for public health purposes.

#### 34 Announced entitlement

The chief executive must—

- (a) set an announced entitlement for water licences located within zone 17A to take effect on the first day of each water year
- (b) recalculate the announced entitlement for the zone following a significant recharge event if the current announced entitlement is less than 100 per cent
- (c) reset the announced entitlement for the zone only if the recalculation indicates that the announced entitlement would—
  - (i) increase by five or more percentage points, or
  - (ii) increase to 100 per cent, and
- (d) make public details of the announced entitlement, including parameters for determining the announced entitlement, on the department's internet site within five business days of setting or resetting an announced entitlement.

### 35 Announced entitlement calculation

For zone 17A, the announced entitlement for water licences in that zone must be calculated, using section 31 and 32 as though a reference to announced allocation or water allocation is a reference to announced entitlement and water licence respectively.

## Subdivision 2 Zones 15AS, 15BS, 15BAS, 15CS, 15DS, 16S and 17S

### 36 Taking water under a water licence

- (1) Water may only be taken under a water licence to which this division applies if—
  - (a) the holder of the licence also holds a valid accredited water quality assessment and the water is extracted for the works to which the assessment relates, or
  - (b) to the extent that the water taken is for public health purposes.
- (2) The volume of water taken under a water licence in a water year must not exceed the annual entitlement calculated for the licence.
- (3) Subsection (1) does not apply for a licence to take groundwater that states the condition 'Groundwater with an electrical conductivity greater than 1500 microsiemens per centimetre may be extracted under this licence for the purposes of operating an aquaculture enterprise.'
- (4) In this section—

**valid accredited water quality assessment** means a report from an accredited service provider stating that, using the departmental sampling methodology, water samples taken from a bore, within the last 12 months, had an electrical conductivity of less than 1 500  $\mu\text{S}/\text{cm}$ .

**accredited service provider** means professional environmental consultants.

### 37 Announced entitlement

For each zone mentioned in table 4 column 1 the announced entitlement for water licences in that zone is the same as the announced allocation or announced entitlement calculated under section 31 or 35 for the corresponding zone in column 2.



Table 4: Announced entitlement reference zones

Column 1	Column 2
Seawater intrusion zone	Associated zone
15AS	15A
15BS	15B
15BAS	15BA
15CS	15C
15DS	15D
16S	16
17S	17A

### 38 Annual entitlement calculation

- (1) The annual entitlement is—
- (a) for a water licence with a nominal entitlement of 20ML or more, the greater of—
    - (i) 20 multiplied by the announced entitlement for that zone, or
    - (ii) 5ML.
  - (b) for a water licence with a nominal entitlement less than 20ML but more than 5ML, the greater of—
    - (i) the nominal entitlement stated on the licence multiplied by the announced entitlement for that zone, or
    - (ii) 5ML
  - (c) for a water licence with a nominal entitlement of 5ML or less—the nominal entitlement stated on the licence.
- (2) Despite subsection 1, the annual entitlement for a licence to take groundwater that states a condition of 'Groundwater with an electrical conductivity greater than 1500 microsiemens per centimetre may only be extracted under this licence for the purposes of operating an aquaculture enterprise' for a licence with a location of—
- (a) Zone 15CS—the nominal entitlement multiplied by 0.3, or
  - (b) Zone 17S—the nominal entitlement multiplied by 0.5.

## Subdivision 3 Zones 11A, 11B, 12A, 12B, 13A, 13B, 15A, 15B, 15BA and 15C

### 39 Announced entitlement

The chief executive must—

- (a) in accordance with section 49X of the Water Plan set an announced entitlement of zero per cent (0%) for water licences located within zone 11A, 11B, 12A, 12B, 13A, 13B, 15A, 15B, 15BA and 15C until 30 June 2025.
- (b) make public details of the announced entitlement.

## Part 2 Dealing with water allocations

### Division 1 Permitted changes

#### 40 Subdivisions or amalgamations

- (1) Subdivision of a water allocation is permitted where—
  - (a) the nominal volume and annual volumetric limit of each of the new water allocations are in the same proportions as the nominal volume and annual volumetric limit of the water allocation that is being subdivided, and
  - (b) the location, water allocation group, flow conditions and other conditions of the new water allocations are the same as that of the water allocation that is being subdivided.
- (2) Amalgamation of water allocations is permitted where—
  - (a) the water allocations being amalgamated state the same location, water allocation group, flow conditions and other conditions, and
  - (b) for a water allocation with a water allocation group of 10, the conditions of the new water allocation must state all conditions that are stated on any of the allocations being amalgamated.

#### 41 Purpose

A change to the purpose of a water allocation is permitted where the change results in the purpose being 'rural' or 'any'.

#### 42 Location

- (1) A change to the location of a water allocation is permitted if—
  - (a) the new location is a zone mentioned in table 5 column 4, and
  - (b) it would not result in the total nominal volume of water allocations for a zone greater than the allowable nominal volume for the zone, identified in table 5 column 5, and
  - (c) it would not result in the total nominal volume of water allocations for a sub-area greater than the allowable nominal volume for the sub-area identified in table 5 column 3, and
  - (d) if the new location is not in the same sub-area to the current location—
    - (i) the water allocation group is changed to reflect water allocation group stated in column 1 for the new location, and
    - (ii) the annual volumetric limit of the water allocation is changed using Equation 1, and
    - (iii) if the new location is 10A or 10B—the conditions must state 'Water under this authorisation may only be taken from a point of take that is further than 200m from the outer bank of Sandy Creek.'
- (2) Subsection (1) (c) does not apply for a change of location for a water allocation from zone 4B to zone 7D, if it is assessed and approved through the process in section 45
- (3) In this section—

the **total nominal volume of water allocations for a zone** is the total nominal volume of all water allocations located in the zone and for which relevant valid change certificates have been issued under section 159 of the *Water Act 2000*.

the **total nominal volume of water allocations for a sub-area** is the total nominal volume of all water allocations located in zones within the sub-area and for which relevant valid change certificates have been issued under section 159 of the *Water Act 2000*.

**Equation 1: Annual volumetric limit adjustment**

$$WA_{AVL} = WA_{NV} \times Z_{TI}$$

Where the following terms mean–

- (a)  $WA_{AVL}$ —the annual volumetric limit for the water allocation
- (b)  $WA_{NV}$ —the nominal volume for the water allocation, and
- (c)  $Z_{TI}$ —the trading index for the destination sub-area, as detailed in table 5 column 2.

Table 5: Sub-area and zone allowable nominal volumes

Column 1	Column 2	Column 3	Column 4	Column 5
Sub-area / (WAG)	Trade index	Sub-area allowable nominal volume (ML)	Zone	Zone allowable nominal volume (ML)
4	1.30	10 022	4A	3 399
			4B	2 940
			4C	902
			4D	881
			4E	867
			4F	846
			4G	725
5	1.25	1 046	5	1 046
6	1.49	1 023	6	1 023
7	1.22	9 045	7A	1 225
			7B	1 420
			7C	3 743
			7D	3 563
8	1.35	3 730	8A	1 081
			8B	2 022
			8C	806
9	1.16	787	9	787
10	1.61	3 425	10A	3 017
			10B	452
14	1.43	1 757	14A	391
			14B	1 405

## Division 2 Prohibited changes

### 43 Water allocation group

A change to a water allocation group, which is not listed in table 5 is prohibited.

### 44 Location

- (1) A change to a location is prohibited if—
  - (a) the change is to a zone not mentioned in table 5 column 4, or
  - (b) it would result in the total nominal volume of water allocations for a zone greater than the allowable nominal volume for the zone identified in table 5, or
  - (c) it would result in the total nominal volume of water allocations for a sub-area greater than the allowable nominal volume for the sub-area identified in table 5, or
  - (d) the annual volumetric limit of the water allocation is changed other than using equation 1.
- (2) Subsection 1(c) does not apply for a change of location for a water allocation from zone 4B to zone 7D, if it is assessed and approved through the process in section 45
- (3) In this section—

the **total nominal volume of water allocations for a zone** is the total nominal volume of all water allocations located in the zone and for which relevant valid change certificates have been issued under section 159 of the *Water Act 2000*.

the **total nominal volume of water allocations for a sub-area** is the total nominal volume of all water allocations located in zones within the sub-area and for which relevant valid change certificates have been issued under section 159 of the *Water Act 2000*.

## Division 3 Assessed changes

### 45 Location

- (1) The holder of a water allocation that states the location as 'Zone 4B' may apply to the chief executive under section 72 of the Water Regulation 2016 to change the location of a water allocation to 'Zone 7D'.
- (2) The water allocation holder must provide information with the application detailing:
  - (a) any potential adverse impacts on existing water allocation holders in sub-area 7, including zone 7D, and
  - (b) that there is sufficient allowable nominal volume available in zone 7D to accommodate the change to the location on the water allocation.

## Part 3 Seasonal water assignment rules

### Division 1 Water allocations

#### 46 Seasonal water assignment rules

- (1) The chief executive may approve a seasonal water assignment of a water allocation where—
  - (a) the zone from which the extraction occurs under the assignment is the same as the location for the water allocation, or
  - (b) the zone from which the extraction occurs under the assignment is not the location for the water allocation, and—
    - (i) the zone from which the extraction occurs under the assignment is a zone mentioned in table 6, and
    - (ii) the approval would result in a potential take volume for a zone less than or equal to the total allowable take volume for that zone.

- (2) In this section—

the **potential take volume** for a zone, for a given point in time is to be calculated using equation 2.

the **total allowable take volume** for a zone, for a given point in time is to be calculated using equation 3.

#### Equation 2: Potential take for a zone

$$PTV = (VL \times AA) + SWA_{in} - SWA_{out}$$

Where the following terms mean—

- (a) **PTV**—the potential take volume for a zone
- (b) **SWA<sub>in</sub>**—the volume of water seasonally assigned into the zone for the current water year
- (c) **SWA<sub>out</sub>**—the volume of water seasonally assigned out of the zone for the current water year
- (d) **VL**—the sum of the volumetric limits of water allocations located in the zone, and
- (e) **AA**—the current announced allocation for water allocations for the zone.

#### Equation 3: Total allowable take volume

$$TATV = ATV \times AA$$

Where the following terms mean—

- (a) **TATV**—the total allowable take volume for a zone (ML)
- (b) **ATV**—the allowable take volume for a given zone as stated in table 6, and
- (c) **AA**—the current announced allocation for water allocations for the zone.

Table 6: Allowable take volumes for seasonal assignment

Zone	Allowable take volume (ML)
4A	4 418
4B	3 822
4C	1 172
4D	1 145
4E	1 162
4F	1 099
4G	834
5	1 371
6	1 598
7A	1 494
7B	1 732
7C	4 566
7D	4 346
8A	1 459
8B	2 729
8C	1 088
9	912
10A	4 857
10B	727
14A	559
14B	2 009

## Division 2 Water licences

### 47 Seasonal water assignment rules for licences in seawater intruded zones

The chief executive must not approve a seasonal water assignment of water that may be taken under a licence located within zones 15AS, 15BS, 15BAS, 15CS, 15DS, 16S or 17S.

### 48 Seasonal water assignment rules for other licences

The chief executive may only approve a seasonal water assignment of all or part of the water that may be taken under a water licence located within zones 1, 2, 3, 17A or 17B where—

- (a) the seasonal water assignment will be for taking water from a land parcel 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, and
- (c) the assignee is the holder of a groundwater licence within the same zone.

# Chapter 6 Monitoring and reporting

## Part 1 Monitoring

### 49 Water monitoring

- (1) The chief executive must measure or collect; and keep publicly available, records of—
  - (a) water quantity
  - (b) groundwater levels and water quality at assessment sites required to implement the groundwater management provisions of this plan
  - (c) water taken
  - (d) prices for water permanently trade;
  - (e) the number of permanent trades and seasonal assignments, and
  - (f) nominal volume of water permanently traded and seasonally assigned.
- (2) The chief executive must collect and record information on future consumptive demands for water.
- (3) The chief executive may use information collected to support water resource assessment and reporting.

### 50 Natural ecosystems monitoring

The chief executive must collect information on—

- (a) ecological assets that are linked to the ecological outcomes of the Water Plan, and
- (b) the critical water requirements of ecological assets in the plan area, including the provision of these requirements under the Water Plan.

## Part 2 Assessment and reporting

### 51 Assessment

- (1) The chief executive must assess the data mentioned in sections 49 and 50 against the outcomes specified in the Water Plan.
- (2) The chief executive's assessment may be used in assisting the Minister to prepare a report under section 49 of the Water Act 2000.

### 52 Periodical report on seawater intrusion

The chief executive must make publicly available a report, every 5 years from 1 July 2015, describing the extent of seawater intrusion within the plan area, and the likely causes of any changes to the extent.

# Attachment 1 Dictionary

section 4

Term	Definition
Assessment site	Means a geographical location referred to in eastings (E) and northings (N) as Map Grid of Australia 1994 (MGA94) zone 56 coordinates.
Discharge	Discharge is the rate at which a volume of water passes a point in a stream or pipeline per unit of time. This could be measured in litres per second (L/s), cubic metres per second (cumecs m <sup>3</sup> /s) or in megalitres per day (ML/day).
Distribution loss	Water that is 'lost' when delivering water for water allocations in reticulated areas via constructed infrastructure through processes such as (but not limited to) evaporation, seepage, pipeline leakage, accidental loss through temporary pipe failure (breaks), loss through pressure relief systems and scouring.
Ecological asset	An ecological asset can be a species, group of species, a biological function or particular ecosystem or place of value for which water is critical.
Location	(1) For a water allocation, means the zone from which water under the water allocation can be taken. (2) For a water licence, means the Section of the watercourse, lake or spring abutting or contained by the land described on the water licence at which water may be taken.
Megalitre	One million litres.
Quarter or quarterly	Three monthly intervals commencing at the start of the water year.
Stream flow	The total daily flow in megalitres measured at a given point along a watercourse. This includes both natural stream flow and water released from an upstream storage which contributes to flow at that point.
Water year	For the Eton Water Supply Scheme, the period from 1 April to 31 March in the following year.



# Attachment 2 Announced allocation decision tables for underground water allocations

Table 7: Announced allocation decision table for Zone 4A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	710400	7660493	12500086	20.96	17.00
2	712735	7660279	12500087	17.96	14.00
3	715918	7658668	12600046	14.04	9.00

Table 8: Announced allocation decision table for Zone 4B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	698478	7660149	12600030	36.60	30.00

Table 9: Announced allocation decision table for Zone 4C

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	693173	7657904	12600028	38.40	33.00

Table 10: Announced allocation decision table for Zone 4D

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	688285	7647011	12500051	54.32	52.25
2	689966	7642778	12500053	61.20	57.00
3	688802	7651804	12500076	47.44	44.35

Table 11: Announced allocation decision table for Zone 4E

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	692279	7660561	12500067	43.88	38.00
2	688089	7657564	12500495	48.44	44.00

Table 12: Announced allocation decision table for Zone 4F

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	675302	7662288	12500014	73.34	71.60
2	683239	7654697	12500044	51.96	49.50
3	681520	7658345	12500060	60.78	57.00

Table 13: Announced allocation decision table for Zone 4G

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	689954	7661664	12500065	41.05	39.92
2	691827	7661458	12500066	42.44	38.00

Table 14: Announced allocation decision table for Zone 5

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	683512	7653309	12500047	59.70	54.00

Table 15: Announced allocation decision table for Zone 6

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	688348	7659232	12500263	47.10	42.00

Table 16: Announced allocation decision table for Zone 7A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	705192	7650758	12600378	27.10	22.00
2	706333	7649132	12600484	25.36	22.00

Table 17: Announced allocation decision table for Zone 7B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	705852	7652153	12600055	28.36	25.00
2	705192	7650758	12600378	27.10	22.00

Table 18: Announced allocation decision table for Zone 7C

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	703287	7652308	12600021	30.60	25.50
2	702823	7654467	12600431	35.08	29.20
3	704018	7653160	12600489	28.15	22.00

Table 19: Announced allocation decision table for Zone 7D

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	697021	7656598	12600025	37.68	34.20
2	701486	7658359	12600492	36.78	33.00
3	698138	7658307	12600493	37.80	36.00

Table 20: Announced allocation decision table for Zone 8A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	706103	7653780	12600053	29.80	25.00
2	707280	7653304	12600488	29.50	25.00

Table 21: Announced allocation decision table for Zone 8B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	707371	7658286	12600035	29.80	25.00
2	708082	7657477	12600038	33.18	27.00

Table 22: Announced allocation decision table for Zone 8C

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	713448	7652948	12600041	19.80	15.00

Table 23: Announced allocation decision table for Zone 9

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	701784	7647404	12600015	34.98	32.70

Table 24: Announced allocation decision table for Zone 10A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	707453	7646503	12600063	18.50	16.70
2	712624	7645022	12600467	10.12	7.50

Table 25: Announced allocation decision table for Zone 10B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	703661	7649904	12600018	29.38	26.00

Table 26: Announced allocation decision table for Zone 11A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	716451	7657554	12600044	14.72	12.00
2	719247	7655148	12600482	5.80	4.25
3	719004	7656036	12600548	10.48	7.00

Table 27: Announced allocation decision table for Zone 11B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	716565	7655276	12600042	11.36	9.85
2	715664	7656949	12600043	14.55	12.70

Table 28: Announced allocation decision table for Zone 12A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	716706	7658494	12600045	14.10	9.00
2	721011	7657820	12600498	8.66	5.00
3	719335	7658187	12600574	10.10	5.00

Table 29: Announced allocation decision table for Zone 12B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	719938	7655077	12600072	7.30	4.00
2	720179	7656084	12600479	9.60	6.00

Table 30: Announced allocation decision table for Zone 13A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	717111	7648531	12600224	6.48	2.00
2	718422	7651713	12600227	3.80	2.00
3	718595	7652339	12600474	3.80	2.00

Table 31: Announced allocation decision table for Zone 13B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	718011	7646827	12600223	4.10	2.00
2	717111	7648531	12600224	6.48	2.00
3	718501	7649432	12600422	5.53	2.50

Table 32: Announced allocation decision table for Zone 14A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	714910	7643454	12600250	5.56	4.00

Table 33: Announced allocation decision table for Zone 14B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	708141	7643879	12600465	20.07	16.00
2	711215	7643182	12600468	15.78	11.50

Table 34: Announced allocation decision table for Zone 15A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	719767	7661725	12500094	12.14	10.00

Table 35: Announced allocation decision table for Zone 15B

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	721398	7659687	12500498	3.92	2.30

Table 36: Announced allocation decision table for Zone 15BA

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	723059	7654585	12600075	3.42	1.50
2	722463	7655929	12600540	5.68	2.20
3	723230	7657127	12600544	5.98	2.20

Table 37: Announced allocation decision table for Zone 15C

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	721897	7650590	12600229	3.50	2.00
2	721643	7648840	12600230	5.00	2.00
3	724241	7648758	12600231	2.42	2.00
4	723384	7651169	12600515	2.54	2.00

Table 38: Announced allocation decision table for Zone 15D

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	716434	7645279	12600255	3.62	2.00
2	718734	7644787	12600497	3.62	2.00

Table 39: Announced allocation decision table for Zone 16

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	718734	7644787	12600497	3.62	2.00

Table 40: Announced allocation decision table for Zone 17A

Column 1 Assessment Site Number	Column 2 Location		Column 3 Bore Registered Number	Column 4 100% AA factor Reference Level (m AHD)	Column 5 0% AA factor Reference Level (m AHD)
	Eastings	Northings			
1	722476	7637999	12600271	5.50	5.00
2	721734	7638502	12600286	7.00	6.00