

Water Act 1989

PERMISSIBLE CONSUMPTIVE VOLUME GROUNDWATER ORDER 2024

I, **Hon Harriet Shing MP**, Minister for Water, as Minister administering the **Water Act 1989**, make the following Order:

1. Citation

This Order is called the Permissible Consumptive Volume Groundwater Order 2024 (this Order).

2. Authorising provision

This Order is made under section 22A(1) of the **Water Act 1989**.

3. Commencement

This Order comes into operation on the date it is published in the Victoria Government Gazette.

4. Purpose

The purpose of this Order is to set the permissible consumptive volumes for groundwater areas specified in the Order.

5. Definitions

In this Order –

‘**Act**’ means **Water Act 1989**;

‘**AHD**’ means Australian Height Datum as defined in the Surveying (Cadastral Surveys) Regulations 2015;

‘**contour line**’ in relation to the Paaratte Groundwater Management Area means, a line coloured green on the Paaratte Groundwater Management Area Plan joining points that have the same elevation in metres AHD. Contour lines on the Paaratte Groundwater Management Area Plan have a value attributed to them which is a measure of their elevation by reference to AHD;

‘**formula**’ means $((((A - B) / L) \times S) + B)$ where:

A = is the highest elevation of the Contour Line (in metres AHD) on the respective sheet of the Paaratte Groundwater Management Area Plan nearest to the Point;

B = is the lowest elevation of the Contour Line (in metres AHD) on the respective sheet of the Paaratte Groundwater Management Area Plan nearest to the Point;

L = is the shortest distance of a straight line (in metres) between the nearest highest and nearest lowest elevation Contour Lines on the respective sheet of the Paaratte Groundwater Management Area Plan and intersecting the Point;

S = is the shortest distance of a straight line (in metres) between the nearest lowest elevation Contour Line on the respective sheet of the Paaratte Groundwater Management Area Plan and the Point;

‘Dairy Shed Water Licence Transition Program’ means the Program run by the Department of Energy, Environment and Climate Action developed to ensure water used in dairy sheds, such as water for washing yards, milking equipment, platforms and other plant, is fully licensed;

‘geographical boundary’ in relation to the Paaratte Groundwater Management Area means the line coloured red on the Paaratte Groundwater Management Area Plan and is referable to a 2 dimensional space;

‘All other formations’ in Column E of Table 2 in this Order means all formations from the land surface to 50 metres below the base of the Tertiary Confined Sand Aquifer or 200 metres below the land surface whichever is deeper, excluding the Pliocene Sands Aquifer, Tertiary Limestone Aquifer, and the Tertiary Confined Sand Aquifer;

‘Lower Eastern View formation’ in relation to the Jan Juc Groundwater Management Area means the basal member of the Eastern View Group which was formed in the Paleocene Period (Lygistepollenites balmei Zone), which consists of micaceous silts, carbonaceous clays, brown coal and fine to coarse grained sands and gravels and which overlies the Otway Group, the stratigraphic unit as described in the Australian Stratigraphic Units Database;

‘LTB’ means the stratigraphic unit ‘Mornington Volcanic Group’ as registered in the Geoscience Australia – Australia Stratigraphic Units Database (Strat. No. 76939);

‘MAR scheme’ means a managed aquifer recharge scheme being a scheme or schemes for the intentional recharge of an aquifer, either by injection or infiltration, and recovery by planned extraction;

‘Paaratte Groundwater Management Area Plan’ means Plan No. LEGL./18-090 lodged in the Central Plan Office, Department of Environment, Land, Water and Planning.

‘Paaratte Groundwater Management Area’ ; is a three (3) dimensional space delineated by:

- (i) a geographical area as shown by the Geographical Boundary on Sheets 1 and 2 of the Paaratte Groundwater Management Area Plan; and
- (ii) geological formations (which form the groundwater area) with upper and lower surfaces (upper and lower elevation boundaries) as shown by Contour Lines on Sheets 1 and 2 of the Paaratte Groundwater Management Area Plan respectively, where:
 - (a) the upper boundary of the Paaratte Groundwater Management Area for any Point within the Geographical Boundary where a Point in sheet 1 of the Paaratte Groundwater Management Area Plan is located:
 - in an area coloured blue on the Paaratte Groundwater Management Area Plan, the upper boundary is the ground surface; or

- on a Contour Line, the elevation of the upper boundary is the elevation of the Contour Line; or
 - between a Contour Line and the Geographical Boundary of the Area or an area coloured blue on the Paaratte Groundwater Management Area Plan, the elevation of the upper boundary is the elevation of the Contour Line nearest to the Point; or
 - between two Contour Lines, the elevation of the upper boundary is determined by the Formula;
- (b) The lower boundary of the Paaratte Groundwater Management Area for any Point within the Geographical Boundary where a Point in sheet 2 of the Plan is located:
- in an area coloured orange on the Paaratte Groundwater Management Area Plan, the lower boundary is unlimited in elevation; or
 - on a Contour Line, the lower boundary is the elevation of the Contour Line; or
 - within one encapsulating Contour Line or between a Contour Line and the Geographical Boundary of the Area or an area coloured orange on the Paaratte Groundwater Management Area Plan, the elevation of the lower boundary is the elevation of the Contour Line nearest to the Point; or
 - between two Contour Lines, the lower boundary is determined by the Formula;

‘PCV’ means a permissible consumptive volume declared under section 22A(1) of the Act;

‘Plan’ means a Plan lodged in the Central Plan Office, LANDATA[®], State Government of Victoria;

‘Pliocene Sands Aquifer’ means the stratigraphic unit ‘Parilla Sand’ as registered in the Geoscience Australia – Australia Stratigraphic Units Database (Strat. No. 14873);

‘Polluted’ means pollute (past tense) as defined in section 3 of the Water Act 1989.

‘Point’ means a geographical location at ground surface level on the Paaratte Groundwater Management Area Plan;

‘QA’ means the combined stratigraphic units of ‘Bridgewater Formation’ as registered in the Geoscience Australia – Australia Stratigraphic Units Database (Strat. No. 2543);

‘Returned’ means, for the purposes of clause 7(b)(iv), water taken under a section 51 licence that is:

- (a) put back into the same groundwater area, within the same water season; and
- (b) measured and accounted for; and
- (c) not polluted when it is put back into the same groundwater area -

in accordance with the conditions on that section 51 licence.

‘section 51 licence’

A licence issued under section 51 of the Water Act 1989, including any conditions prescribed or fixed under section 56 of that Act.

‘sub-zone’ means that part of the West Wimmera Groundwater Management Area that is the area identified as a sub-zone in Plan No. LEGL./12-077 lodged in the Central Plan Office;

‘Tertiary Confined Sand Aquifer’ means the stratigraphic unit ‘Renmark Group’ as registered in the Geoscience Australia – Australia Stratigraphic Units Database (Strat. No. 16036);

‘Tertiary Limestone Aquifer’ means the stratigraphic unit ‘Murray Group’ as registered in the Geoscience Australia – Australia Stratigraphic Units Database (Strat. No. 13544);

‘this Order’ means this Permissible Consumptive Volume Groundwater Order 2024;

‘Upper Eastern View formation’ in relation to the Jan Juc Groundwater Management Area means the member of the Eastern View Group which was formed in the Early Eocene Period (Lower to Upper Malvacipollis diversus Zones), which consists of clay, silty clay, silt to fine, medium grained sand sequences with minor fine gravel lenses and brown coal seams in the top of the sequence and which overlies the Middle Eastern View formation;

‘UTAF’ means the stratigraphic unit ‘Brighton Group’ as registered in as registered in the Geoscience Australia – Australia Stratigraphic Units Database (Strat. No. 2556);

‘Water Season’ has the same meaning as in the Act and means any period of 12 calendar months beginning on 1 July in any year and ending on 30 June in the following year;

‘zone’ means a zone as referred to on a Plan.

6. Areas to Which the Order Applies

The areas to which this Order applies are shown on the Plans listed in Column A of Table 1 and Table 2 below and include the subsurface stratum of land and the geological formations applicable to the zones and depths marked on each Plan or described in Column C of Table 1 and Column A of Table 2. The areas shown on the Plans are, or shall be known by, the name listed in Column A of Table 1 and Table 2.

7. Permissible Consumptive Volumes

7.1 Subject to clause 7.3, I declare that the total volume of groundwater that may be taken in each area listed in Table 1 and Table 2, whether used in that area or elsewhere, under the Act or any other Act, during a water season must not exceed:

- (a) the volume listed in Column D of Table 1 and Columns B to E in Table 2; and
- (b) the volume listed in Column D of Table 1 and Columns B to E in Table 2 plus the volume that may be taken under any licence issued or amended or to be issued or amended under section 51 of the Act in the area –
 - (i) to take and use groundwater for the purpose of dairy shed cleaning as provided for under the Dairy Shed Water Licence Transition Program; and
 - (ii) in respect of a MAR scheme and which contains a condition prohibiting the licence holder from taking more groundwater than the volume of water injected or infiltrated under the scheme into an aquifer in the area; and
 - (iii) to take over a period of a maximum of 14 consecutive days for the purpose of a single pumping test:
 - A. no more than 30 megalitres of groundwater; or

- B. groundwater amounting to no more than 2 per cent of the PCV declared for the area;

whichever is the lesser amount; and

- (iv) that must be returned subject to the conditions on that licence.

Note - For groundwater area accounting purposes, returned water is accounted for such that the licensed consumptive volume (inclusive of any loss) is the take volume minus the return volume. Only the licensed consumptive volume is considered within the permissible consumptive volume in Column D of Table 1 and Columns B, C, D and E of Table 2.

7.2 Clause 7(b)(iv) only applies to licences issued, renewed or amended after the commencement of this Order to include conditions requiring water to be returned.

7.3 Where:

- (a) a licence was issued prior to the commencement of this Order that involved the return of water, with the return either specified as a condition of the licence or not; and
- (b) that licence is amended or renewed resulting in a volume now being accounted for under Clause 7.1(b)(iv) -

the volume determined under clause 7.1(a) is taken to be reduced by the volume accounted for under 7.1(b)(iv).

TABLE 1

| Column A | Column B | Column C | Column D |
|---|--------------------|---|-----------------------------|
| Groundwater area name | Plan number | Stratum, formation or zone | PCV (megalitres) |
| Barnawartha Groundwater Management Area | LEGL./04-128 | All formations below the surface. | 2,100 |
| Broken Groundwater Management Area | LEGL./18-258 | In the hatched area all formations below 25 metres from the surface to a depth of 200 metres otherwise all formations below the surface to a depth of 200 metres. | 3,732 |
| Bungaree Groundwater Management Area | LGL./97-224 | All formations below the surface. | 5,334 |
| Cardigan Groundwater Management Area | LEGL./04-504 | All formations below the surface. | 3,967 |
| Central Victorian Mineral Springs Groundwater Management Area | LEGL./13-260 | All formations to 200 metres below the surface, or 50 metres below the base of the basalt or deep lead whichever is the greater. | 6,024 |
| Colongulac Groundwater Management Area | LEGL./04-129 | All formations from surface to 60 metres below the surface. | 4,695 |
| Condah Water Supply Protection Area | LGL./97-226 | All formations from 70 metres to 200 metres below the surface. | 7,475 |
| Corinella Groundwater Management Area | LEGL./06-487 | All formations below the surface. | 2,550 |
| Cut Paw Paw Groundwater Management Area | LEGL./04-131 | All formations below 50 metres from the surface. | 3,650 |
| Denison Water Supply Protection Area | LEGL./01-87 | All formations from the surface to 25 metres below surface. | 18,502 |
| Deutgam Water Supply Protection Area | LGL./97-230 | All formations from the surface to 30 metres below the surface. | 5,100 |
| Eildon Groundwater Management Area | LEGL./15-280 | All formations from the surface to a depth of 200 metres. | 1,496 |
| Frankston Groundwater Management Area | LEGL./04-133 | All formations below the surface. | 3,200 |
| Gellibrand Groundwater Management Area | LEGL./04-134 | All formations below the surface. | 0 |
| Gerangamete Groundwater Management Area | LEGL./04-135 | All formations below the surface. | 239 |
| Giffard Groundwater Management Area | LEGL./04-136 | All formations from 50 metres to 200 metres below the surface. | 5,689 |

| Column A | Column B | Column C | Column D |
|--|--------------------|---|--------------------------------|
| Groundwater area name | Plan number | Stratum, formation or zone | PCV (megalitres) |
| Glenormiston Groundwater Management Area | LEGL./04-137 | All formations from the surface to 60 metres below the surface. | 2,698 |
| Hawkesdale Groundwater Management Area | LEGL./06-352 | The surface substratum of land and the geological formations applicable to the zones and depths marked on the Plan. | 16,161 |
| Heywood Groundwater Management Area | LEGL./04-139 | All formations from surface to 70 metres below the surface. | 8,500 |
| Jan Juc Groundwater Management Area** | LEGL./09-252 | Zone 1 – All formations below the surface. | 250 |
| | | Zone 2 – Upper Eastern View Formation. | 4,000 |
| | | Zone 2 – Lower Eastern View Formation. | 35,000 in any five year period |
| | | Zone 2 – All formations below the surface other than the Lower Eastern View formation and the Upper Eastern View formation. | 0 |
| Katunga Water Supply Protection Area | LEGL./06-251 | All formations below 25 metres from the surface. | 60,577 |
| Kiewa Groundwater Management Area | LEGL./14-207 | All formations to 200 metres below the surface. | 3,852 |
| Koo Wee Rup Water Supply Protection Area | LEGL./04-230 | All formations below the surface. | 12,915 |
| Lancefield Groundwater Management Area | LEGL./04-143 | All formations below the surface. | 1,485 |
| Leongatha Groundwater Management Area | LEGL./04-144 | All formations below the surface. | 6,500 |
| Loddon Highlands Water Supply Protection Area | LEGL./09-421 | All formations below the surface. | 20,697 |
| Lower Campaspe Valley Water Supply Protection Area | LEGL./09-253 | All formations below the surface with the exception of all formations from the surface to 25 metres below the surface north of the Waranga Western Channel. | 55,875 |
| Lower Ovens Groundwater Management Area | LEGL./06-494 | All formations below the surface. | 25,200 |
| Merrimu Groundwater Management Area | LEGL./04-145 | All formations from the surface to 30 metres below the surface. | 451 |

| Column A | Column B | Column C | Column D |
|--|--------------------|--|-----------------------------|
| Groundwater area name | Plan number | Stratum, formation or zone | PCV (megalitres) |
| Mid Goulburn Groundwater Management Area | LEGL./06-495 | Zone 1070 Kialla – All formations below 25 metres below ground surface to 50 metres into bedrock or 200 metres from the surface (whichever is the greater depth). | Collectively 12,470 |
| | | Zone 1071 Nagambie– All formations from ground surface to 50 metres into bedrock or 200 metres from the surface (whichever is the greater depth). | |
| Mid Loddon Groundwater Management Area | LEGL./03-095 | All formations below the surface. | 34,037 |
| Moe Groundwater Management Area | LEGL./04-146 | All formations below 25 metres from the surface. | 8,200 |
| Moorabbin Groundwater Management Area | LEGL./04-147 | All formations below the surface. | 2,700 |
| Murrayville Groundwater Management Area | LEGL./ 16-483 | All formations from 70 metres to 200 metres below the surface. | 11,005 |
| Nepean Groundwater Management Area | LEGL./04-220 | Upper aquifer being all aquifers from: (A) the natural surface to 200 metres below the natural surface; or (B) the natural surface to 50 metres below the base of the Quaternary Aquifer (QA), Upper Tertiary Fluvial Aquifer (UTAF) or the Lower Tertiary Basalt (LTB); whichever is the deeper. | 6,110 |
| Newlingbrook Groundwater Management Area | LEGL./04-153 | All formations below the surface. | 1,977 |
| Nullawarre Water Supply Protection Area | LGL./97-245 | All formations from surface to 250 metres below the surface. | 22,741 |
| Orbost Groundwater Management Area | LEGL./04-154 | All formations from 20 metres to 45 metres below the surface. | 1,217 |
| Paaratte Groundwater Management Area | LEGL./18-090 | All formations contained within the Paaratte | 4,606 |

| Column A | Column B | Column C | Column D |
|--|--------------------|--|-----------------------------|
| Groundwater area name | Plan number | Stratum, formation or zone | PCV (megalitres) |
| | | Groundwater Management Area as defined above. | |
| Portland Groundwater Management Area | LEGL./04-156 | All formations below 200 metres from the Surface. | 7,795 |
| Rosedale Groundwater Management Area | LEGL./04-157 | Zone 1 – All formations from 50 metres to 150 metres below the surface. | Collectively 23,373 |
| | | Zone 2 – All formations from 25 metres to 350 metres below the surface. | |
| | | Zone 3 – All formations from 200 metres to 300 metres below the surface. | |
| Sale Water Supply Protection Area | LEGL./01-88 | All formations from 25 to 200 metres below the surface. | 20,297 |
| Stratford Groundwater Management Area | LEGL./04-158 | Zone 1 – All formations below 250 metres from the surface. | Collectively 27,686 |
| | | Zone 2 – All formations below 350 metres from the surface. | |
| Strathbogie Groundwater Management Area | LEGL./13-129 | All formations to 200 metres below the surface. | 1,660 |
| Tarwin Groundwater Management Area | LEGL./04-159 | All formations from surface to 25 metres below the surface. | 1,300 |
| Upper Goulburn Groundwater Management Area | LEGL./13-128 | All formations to 200 metres below the surface. | 8,568 |
| Upper Murray Groundwater Management Area | LEGL./14-208 | All formations to 200 metres below the surface. | 7,674 |
| Wa De Lock Groundwater Management Area | LEGL./04-160 | Zone 1 – All formations from the surface to 25 metres below the surface. | 12,535 |
| | LEGL./04-161 | Zone 2 – All formations from surface to 25 metres below the surface. | 17,000 |
| | LEGL./04-162 | Zone 3 – All formations from surface to 25 metres below the surface. | 1,200 |
| Wandin Yallock Groundwater Management Area | LEGL./03-133 | All formations below the surface. | 3,027 |
| Warrion Water Supply Protection Area | LGL./97-252 | All formations below the surface. | 14,086 |

| Column A | Column B | Column C | Column D |
|--|----------------------------------|--|-------------------------------|
| Groundwater area name | Plan number | Stratum, formation or zone | PCV (megalitres) |
| West Wimmera Groundwater Management Area | LEGL./12-075 and LEGL./12-077 | For each aquifer identified in table 2 for each zone specified in Column A of Table 2. | See Columns B to D in Table 2 |
| Wy Yung Water Supply Protection Area | LEGL./01-49 | Zone 1 – All formations from surface to 25 metres below the surface. | 691 |
| | | Zone 2 – All formations from surface to 25 metres below the surface. | 5,342 |
| | | Zone 3 – All formations from surface to 25 metres below the surface. | 1,430 |
| Yangery Water Supply Protection Area | LGL./97-254 | All formations from surface to 100 metres below the surface. | 14,352 |
| Yarram Water Supply Protection Area | LEGL./02-032 | Zone 1 – All formations below 200 metres from the surface. | Collectively 25,690 |
| | | Zone 2 – All formations below the surface. | |

**The permissible consumptive volume for the Jan Juc Groundwater Management Area includes the volume of groundwater provided for in the Bulk Entitlement (Anglesea Groundwater) Order 2009

TABLE 2

| West Wimmera Groundwater Management Area | | | | |
|--|------------------------|----------------------------|--------------------------------|----------------------|
| Column A | Column B | Column C | Column D | Column E |
| Area Zone | Pliocene Sands Aquifer | Tertiary Limestone Aquifer | Tertiary Confined Sand Aquifer | All other formations |
| LEGL./12-075 and LEGL./12-077 | PCV (megalitres) | PCV (megalitres) | PCV (megalitres) | PCV (megalitres) |
| Big Desert Zone | 0 | 25 | 0 | 0 |
| Gymbowen Zone | 50 | 2,000 | 200 | 0 |
| Little Desert Zone | 0 | 25 | 0 | 0 |
| Neuarpur Zone | | | | |
| • Neuarpur Sub-zone 1 | 0 | 20,700 | 200 | 0 |
| • Neuarpur Sub-zone 2 | 0 | 4,050 | 200 | 0 |
| Northern Zone | 50 | 22,390 | 500 | 0 |
| Southern Zone | | | | |
| • Apsley Sub-zone | 0 | 2,901 | 200 | 0 |
| • Edenhope Sub-zone | 50 | 680 | 50 | 0 |
| • Langkoop Sub-zone | 0 | 2,000 | 100 | 0 |
| • Ullswater Sub-zone | 50 | 888 | 100 | 0 |



Hon Harriet Shing MP
Minister for Water

Dated: 12 / 07 / 2024