

Bega-Tathra water supply system

Drought Management Action Plan 2019-20

Water supply zone: Bega-Tathra - Bega, North Bega, Tarraganda, Kalaru, Tathra, Tathra River Estate, Mogareeka and rural connected properties between Bega and Kalaru

| Monitoring location | Drought Management Stage | Water Availability Stage | Individual Daily Extraction Limit (IDEL) (ML/d) | Trigger Level for Actions | Supply-Side Actions | Demand-Side Actions (e.g. water restrictions) | Demand Reduction Target (%) |
|---|--------------------------|--------------------------|---|---|--|---|---|
| a. Bega River @ Kanoona gauging station (219032) b. Bega River and Bega borefield c. Groundwater level @ The Ranch (GWO39001) d. Yellow Pinch Dam (YPD) d. Reservoir inflow/outflow | Drought preparation | Very high flow (C) | b. Unlimited | a. >160 ML/d d. >95% | 1. Pump water from Bega borefield to meet demand. | 1) Permanent Water Wise Measures. 2) Ensure reservoir flowmeters are reading accurately to enable demand reduction target analysis | 0 |
| | | | | a. >160 ML/d d. ≤95% | 2. As per 1. 3. Pump water from Bega borefield to YPD using electricity tariff saving measures if YPD >80% capacity and without electricity saving tariff measures if YPD ≤80%. | 3) As per 1) and 2). | 0 |
| | | High flow(B) | b. 12.8 | a. ≤160 ML/d d. ≤95% | 4. As per 1. 5. As per 3 and limit total daily extraction from the borefield to the IDEL ¹ . | 4) As per 1) and 2). | 0 |
| | | Moderate flow (A2) | b. 6.7 | a. ≤65 ML/d | 6. As per 1. 7. As per 3 and limit total daily extraction from the borefield to the IDEL ¹ . | 5) As per 1) and 2). | 0 |
| | | Low flow (A1) | b. 4.7 | b. no visible surface flow c. ≤7.0 mAHD | 8. As per 1. 9. As per 3 and limit total daily extraction from the borefield to the IDEL ¹ . 10. Clean and purge all bores 11. Monitor standing water level and drawdown levels at the bores to compare with pump intake levels. | 6) As per 1) and 2). 7) Review mains flushing program and suspend as appropriate. | 1 |
| | Low Flow | b. 4.7 | c. ≤5.5 mAHD | 12. As per 1. 13. As per 3 and limit total daily extraction from the borefield to the IDEL ¹ . 14. As per 11. 15. Liaise with DPIE-Water, Bega Cheese, BVWUA and local irrigators about Water Sharing Plan (WSP) requirements to reduce extraction from the Mid Bega River Sands source and slow the rate of groundwater level decline. | 8) As per 1) and 2). 9) Provide appropriate media/community news about water supply situation, water wise measures and website information. | 3 | |
| | Drought Response | Very Low Flow | b. 3.5 | c. ≤4.5 mAHD | 15. As per 1 and 11. 16. Limit total daily extraction from the borefield to the IDEL ¹ . | 10) Implement <u>Level 1 water restrictions</u> . 11) Provide appropriate media/community news about water supply situation, water restrictions and website information. 12) Implement process to manage applications for variations. 13) Investigate water pressure management options. | 10 |
| | | | | | b. 3.5 | c. ≤3.5 mAHD | 17. As per 1, 11 and 16. 18. Determine infrastructure requirements for alternative emergency water sources, such as additional bores at Bega, desalination and recycled water. |

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|---------------------|--------------------------|--------------------------|---|---------------------------|---|---|-----------------------------|
| | | Emergency level 1 | b. 3.5 | c. ≤3.0 mAHD | 19. As per 1, 11 and 16. 20. Determine infrastructure requirements for alternative emergency water sources, such as additional bores at Bega, desalination and recycled water. | 17) Introduce <u>Level 3 water restrictions</u> . 18) As per 11) 19) Suspend applications for variations process and cancel all prior approvals. 20) No public watering of public parks, gardens and playing fields. | 20 |
| | | Emergency level 2 | b. 3.5 | c. ≤2.5 mAHD | 21. As per 1 and 11. 22. Build emergency water source infrastructure. | 21) Introduce <u>Level 4 water restrictions</u> . 22) As per 11), 19) and 20). | 30 |
| | | Emergency level 3 | b. 3.5 | c. ≤2.0 mAHD | 23. As per 1 and 11. 24. Connect and commission emergency water source infrastructure. 25. Provide intermittent reticulation supply from available water sources if necessary. 26. Cart water to designated areas if required. | 23) Water is for minimum health and sanitation requirements only. 24) As per 11), 19), 20) and 22). | 50 |

¹ The daily volume of water available for pumping to YPD is determined by the IDEL minus Bega-Tathra daily demand from the previous day. Compliance with the IDEL for the month of January is determined by the daily average of the total volume extracted from the borefield during the month.

Water Restrictions Levels

| Level | Garden watering | Fixed sprinklers and unattended hoses | Watering of paved areas | Drip irrigation systems and micro-sprays | Watering of lawns | Washing of vehicles/boats & topping up of swimming pools |
|--------------|--|---------------------------------------|-------------------------|---|------------------------|--|
| ONE | One hand-held hose per property may be used 6-8 am AND 6-8 pm ¹ | Not permitted | Not permitted | May only be used if fixed to a single tap per property and only in lieu of a hand-held hose | As per garden watering | As per garden watering ³ |
| TWO | One hand-held hose per property may be used for a maximum of 60 MINUTES PER DAY under an Odds and Evens ² system between: 6-8 am OR 6-8 pm ¹ | Not permitted | Not permitted | Not permitted | As per garden watering | As per garden watering ³ |
| THREE | Bucket watering only between: 6-8 am OR 6-8 pm ¹ | Not permitted | Not permitted | Not permitted | Not permitted | As per garden watering ³ |
| FOUR | Not permitted | Not permitted | Not permitted | Not permitted | Not permitted | Not permitted |

¹ Times shown are for Daylight Saving Time. Eastern Standard Time times are 6-9 am and 4-7 pm.

² Odds and Evens System – Houses (residential or multi-residential) with an odd street number may water on odd-numbered days of the month. Houses (residential or multi-residential) with an even street number may water on even-numbered days of the month. No odds and evens system applies for the 31st of January, March, May, July, August, October, December or the 29th February, however all other level 2 restrictions apply.

³ Vehicles and boats should be washed on lawns wherever possible using buckets. A hose may be used for a final rinse under levels 1, 2 and 3