

Brogo-Bermagui water supply system

Drought Management Action Plan 2019-20

Water supply zone: Brogo-Bermagui - Quaama, Cobargo, Bermagui, Fairhaven, Beauty Point, Wallaga Lake, Akolele, Wallaga Lake Koori Village and rural connected properties between Brogo and Couria Creek

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. Brogo Dam (219027) b. Brogo river pump station c. Tilba Dam d. Reservoir inflow/outflow	Drought Preparation	High level	n/a	a. >30%	1. Pump water from the Brogo River to meet demand. 2. Extract water from Couria Ck. weir to meet demand of two properties near Tilba Dam.	1) Permanent Water Wise Measures. 2) Ensure reservoir flowmeters are reading accurately to enable demand reduction target analysis	0
		Mid-level	n/a	a. ≤30%	3. As per 1 and 2. 4. Liaise with WaterNSW regarding water availability and proposed water release regime. Determine daily volumes proposed for release for general security allocations and other uses.	3) As per 1) and 2).	0
		Low level 1	n/a	a. ≤ 20%	5. As per 1, 2 and 4. 6. Investigate water availability from Couria Ck., Tilba Dam and Illawambra Creek and infrastructure required to enable supply.	4) As per 1) and 2). 5) Review mains flushing program and suspend if appropriate. 6) Provide appropriate media/community news about water supply situation, water wise measures and website information.	3
	Drought Response	Low level 2	n/a	a. Water released for high security, riparian users and the environment only	7. As per 1, 2 and 4. 8. Install infrastructure to enable water supply from Couria Ck., Tilba Dam and/or Illawambra Creek.	7) Introduce <u>Level 1 water restrictions</u> . 8) Provide appropriate media/community news about water supply situation, water restrictions and website information. 9) Implement process to manage applications for variations. 10) Investigate water pressure management options.	10
		Very low level	n/a	a. ≤10% c. 100%	9. As per 1, 2, 4 and 8. 10. Investigate water cartage requirements to supply all town/village reservoirs. 11. Advise trunk main customers that alternative water sources may be required. 12. Ensure all infrastructure requirements are in place to enable water supply from Couria Creek and Tilba Dam. 13. Determine infrastructure requirements for alternative emergency water sources, such as bores near Bermagui, desalination and recycled water.	11) Introduce <u>Level 2 water restrictions</u> . 12) As per 8) and 9). 13) As per 11) and implement if appropriate.	15
		Emergency level 1	n/a	a. ≤8% c. ≤100%	14. Pump water from the Brogo River to meet demand of Quaama and trunk main customers to Brogo Tank 2. 15. Pump water from the Brogo River to meet Cobargo demand otherwise extract water from Illawambra Creek weir, if available. 16. Pump water from the Brogo River to meet demand of Wallaga Lake Koori Village, Akolele, Wallaga Lake, Beauty Point, Fairhaven and Bermagui, if available, otherwise supply water from Couria Ck. and/or Tilba Dam. 17. Consider building emergency water source infrastructure.	14) Introduce <u>Level 3 water restrictions</u> . 15) As per 8) 16) Suspend applications for variations process and cancel all prior approvals. 17) No public watering of public parks, gardens and playing fields.	20

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		Emergency level 2	n/a	a. ≤5% b. limited available water c. ≤50%	18. Pump intermittent supply from Brogo River to Quaama reservoir and/or cart water from Bega to Quaama reservoir. 19. Pump intermittent supply from the Brogo River to Cobargo reservoir and/or extract water from Illawambra Creek weir, if available and/or cart water from Bega to meet Cobargo demand. 20. Extract water from Couria Ck. and/or Tilba Dam to meet demand of Wallaga Lake Koori Village, Akolele, Wallaga Lake, Beauty Point and Bermagui, if available, otherwise cart water from any available water sources to town/village reservoirs. 21. Advise trunk main customers that alternative water sources are required. 22. Build, connect and commission emergency water source infrastructure.	18) Introduce <u>Level 4 water restrictions</u> . 19) As per 8), 16) and 17).	30
		Emergency level 3	n/a	a. ≤2% b. limited available water c. ≤10% and no water available	23. Provide intermittent reticulation supply from available water sources 24. Cart water to designated areas	20) Water is for minimum health and sanitation requirements only. 21) As per 8), 16), 17) and 19).	50

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