

# Central Tablelands *Water*



## Water Restrictions Policy

<b>Policy Title:</b>	Water Meter Policy	
<b>Responsible Officer:</b>	Director Operations and Technical Services	
<b>Adopted:</b>	Date: 12.10.2016	Minute Number: 16/079
<b>Last Reviewed:</b>	Date: May 2016	
<b>Version Number:</b>	v1	

1.

The objective of this policy to manage demand during periods of water scarcity to ensure all customers have access to a secure water supply.ACTIVITY	WATER RESTRICTIONS					
	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>RESIDENTIAL WATER USE</b>						
TARGET WATER CONSUMPTION	260 litres/person/day	240 litres/person/day	220litres/person/day	200 litres/person/day	160 litres/person/day	120 litres/person/day
Watering of Lawns Note: Subject to varying Summer and Winter Times	Watering systems, microsprays, drip systems, soaker hoses, non-fixed sprinklers, handheld hoses only.  Summer Time between 1800-0900 hrs only daily.  Winter Time 0600-1000 hrs and 1600-2200 hrs daily.	Watering systems, non-fixed sprinklers, hand held hoses, microsprays, drip systems, soaker hoses, only.  Summer Time between 0600-0900 hrs and between 1800-2100 hrs every second day as per odds and evens system. Winter Time between 0700-1000 hrs and between 1600-1900 hrs every second day as per odds and evens system.	Watering systems, non fixed sprinklers, hand held hoses not permitted at any time. Microsprays, drip systems, soaker hoses, only.  Summer Time between 0600-0900 hrs and between 1800-2100 hrs every second day as per odds and evens system. Winter Time between 0700-1000 hrs and between 1600-1900 hrs every second day as per odds and evens system.	Not permitted	Not permitted	Not permitted

ACTIVITY	WATER RESTRICTIONS					
	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>RESIDENTIAL WATER USE</b>						
<p>Watering of Residential Gardens:</p> <p>Subject to varying Summer and Winter times</p>	<p>Watering systems, microsprays, drip systems, soaker hoses, non fixed sprinklers, hand held hoses only.</p> <p>Summer Time between 1800-0900 hrs only daily.</p> <p>Winter Time 0600-1000 hrs and 1600-2200 hrs daily.</p>	<p>Watering systems, non fixed sprinklers, hand held hoses, microsprays, drip systems, soaker hoses, only.</p> <p>Summer Time between 0600-0900 hrs and between 1800-2100 hrs every second day as per odds and evens system. Winter Time between 0700-1000 hrs and between 1600-1900 hrs every second day as per odds and evens system.</p>	<p>Watering systems, non fixed sprinklers, hand held hoses not permitted at any time. Microsprays, drip systems, soaker hoses, only.</p> <p>Summer Time between 0600-0900 hrs and between 1800-2100 hrs every second day as per odds and evens system. Winter Time between 0700-1000 hrs and between 1600-1900 hrs every second day as per odds and evens system.</p>	<p>Watering systems, non fixed sprinklers, hand held hoses not permitted at any time. Microsprays, drip systems, soaker hoses, only.</p> <p>Summer Time between 1800-2000 hrs only on each Wednesday and Sunday. Winter Time 1600-1800 hrs on each Wednesday and Sunday.</p>	<p>Watering systems, non fixed sprinklers, hand held hoses, microsprays, drip systems, soaker hoses, not permitted at any time. Bucket / watering can watering only.</p> <p>Summer Time between 1800-2000 hrs on Sunday only. Winter Time between 1300-1500 hrs on Sunday only.</p>	Not permitted
Topping up, filling garden water features	Permitted	Permitted	Permitted	Permitted	Not to be topped up or filled.	Not to be topped up or filled.
Irrigation of new turf	Permitted for one week after laying after which level 1 restriction on watering lawns applies	Permitted for one week after laying after which level 2 restriction on watering lawns applies	Permitted for one week after laying after which level 3 restriction on watering lawns applies	Not permitted.	Not permitted.	Not permitted.

ACTIVITY	WATER RESTRICTIONS					
	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>RESIDENTIAL WATER USE</b>						
Washing down walls or paved surfaces	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted
Topping up private swimming pools/spas	Permitted	Only between hours of 0700-0900 and between 1800-2000 hrs, every day.	Only between hours of 0700-0900 and between 1800-2000 hrs, every day provided pool covers are used	Only between hours of 0700-0900 and between 1800-2000 hrs, every day. Pool covers must be used.	Not permitted	Not permitted
First fill of private swimming pools	Permitted	Only between hours of 0700-0900 and between 1800-2000 hrs, every day	Only with Council permission and provided pool covers are used.	Only with Council permission and after water savings elsewhere within property. Covers must be used.	Not permitted	Not permitted
Washing cars at home	Permitted with bucket and rinse with trigger hose on lawn at any time.	Permitted with bucket and rinse with trigger hose on lawn between 0900-1200 hrs any day.	Permitted with bucket only on lawn between 0900-1200 hrs any day.	Permitted with bucket only on lawn between 0900-1200 hrs any day.	Not permitted	Not permitted
Baths, showers	Permitted	Permitted	Permitted	Five (5) minute showers, one bath per person per day	Three (3) minute showers, one bath ( 100 mm depth) per person per day	Three (3) minute showers, one bath ( 100 mm depth) per person per day

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	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>RESIDENTIAL WATER USE</b>						
Washing of clothes	Permitted	Permitted	Full loads only encouraged.	Full loads only permitted.	Full loads only permitted.	Two full loads of clothes per week
Use of evaporative air conditioners	Permitted	Permitted	Permitted	Permitted only 0700-2400 hrs daily	Permitted only 0700-2400 hrs daily, exemptions may be granted to aged accommodation or nursing homes.	Permitted only 1800-2200 hrs daily, exemptions may be granted to aged accommodation or nursing homes.
Inflatable or temporary children pools	Permitted	Permitted	Permitted	Permitted	Not permitted	Not permitted

ACTIVITY	WATER RESTRICTIONS					
	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>NON - RESIDENTIAL WATER USE</b>						
Watering of Lawns Note: Subject to varying Summer and Winter Times	Watering systems, microsprays, drip systems, soaker hoses, non-fixed sprinklers, handheld hoses only.  Summer Time between 1800-0900 hrs only daily.  Winter Time 0600-1000 hrs and 1600-2200 hrs daily.	Watering systems, non-fixed sprinklers, hand held hoses, microsprays, drip systems, soaker hoses, only.  Summer Time between 0600-0900 hrs and between 1800-2100 hrs every second day as per odds and evens system. Winter Time between 0700-1000 hrs and between 1600-1900 hrs every second day as per odds and evens system.	Watering systems, non fixed sprinklers, hand held hoses not permitted at any time. Microsprays, drip systems, soaker hoses, only.  Summer Time between 0600-0900 hrs and between 1800-2100 hrs every second day as per odds and evens system. Winter Time between 0700-1000 hrs and between 1600-1900 hrs every second day as per odds and evens system.	Not permitted	Not permitted	Not permitted

ACTIVITY	WATER RESTRICTIONS					
	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>NON - RESIDENTIAL WATER USE</b>						
Watering of Gardens Note: Subject to varying Summer and Winter times	Watering systems, microsprays, drip systems, soaker hoses, non fixed sprinklers, hand held hoses only.  Summer Time between 1800-0900 hrs only daily.  Winter Time 0600-1000 hrs and 1600-2200 hrs daily.	Watering systems, non fixed sprinklers, hand held hoses, microsprays, drip systems, soaker hoses, only.  Summer Time between 0600-0900 hrs and between 1800-2100 hrs every second day as per odds and evens system. Winter Time between 0700-1000 hrs and between 1600-1900 hrs every second day as per odds and evens system.	Watering systems, non fixed sprinklers, hand held hoses not permitted at any time. Microsprays, drip systems, soaker hoses, only.  Summer Time between 0600-0900 hrs and between 1800-2100 hrs every second day as per odds and evens system. Winter Time between 0700-1000 hrs and between 1600-1900 hrs every second day as per odds and evens system.	Watering systems, non fixed sprinklers, hand held hoses not permitted at any time. Microsprays, drip systems, soaker hoses, only.  Summer Time between 1800-2000 hrs only on each Wednesday and Sunday. Winter Time 1600-1800 hrs on each Wednesday and Sunday.	Watering systems, non fixed sprinklers, hand held hoses, microsprays, drip systems, soaker hoses, not permitted at any time. Bucket / watering can watering only.  Summer Time between 1800-2000 hrs on Sunday only. Winter Time between 1300-1500 hrs on Sunday only.	Not permitted
Topping up public swimming pools/spas, including those in motels etc.	Permitted	Only between of 0700-0900 and between 1800-2000 hrs, every day.	Only between hours of 0700-0900 and between 1800-2000 hrs, every day provided pool covers are used	Only between hours of 0700-0900 and between 1800-2000 hrs, every day. Pool covers must be used.	Not permitted	Not permitted

ACTIVITY	WATER RESTRICTIONS					
	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>NON - RESIDENTIAL WATER USE</b>						
First fill of public swimming pools/spas, including those in motels etc.	Permitted	Only between hours of 0700-0900 and between 1800-2000 hrs, every day	Only with Council permission	Only with Council permission and after water savings elsewhere within property. Covers must be used.	Not permitted	Not permitted
Turf farm irrigation, market gardens	Permitted	Permitted	Irrigation only between 2000-0800 hrs. Business must prepare WSAP.	Business must implement and comply with WSAP	Not permitted	Not permitted
Irrigation of new turf on non-residential premises	Permitted for one week after laying after which level 1 restriction on watering lawns applies	Permitted for one week after laying after which level 2 restriction on watering lawns applies	Permitted for one week after laying after which level 3 restriction on watering lawns applies	Not permitted.	Not permitted.	Not permitted.
Public car and truck wash facilities	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP	Business must implement and comply with WSAP	Not permitted.
Construction industry e.g. mortar or concrete mix	Permitted	Permitted	Permitted	Permitted	Permitted	Not permitted.



ACTIVITY	WATER RESTRICTIONS					
	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>NON - RESIDENTIAL WATER USE</b>						
Construction - wash down, paint prep, curing.	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP	Business must implement and comply with WSAP	Not permitted.
Cleaning - exterior	Permitted with trigger hoses, any time.	Permitted with pressure trigger hoses, any time.	Permitted with pressure trigger hoses. Business must prepare WSAP.	Business must implement and comply with WSAP	Business must implement and comply with WSAP	Not permitted.
Commercial or Government nurseries	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.
Abattoirs	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.
Food or pet food production	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.
Canneries	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.
Pet care	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.

ACTIVITY	WATER RESTRICTIONS					
	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>NON - RESIDENTIAL WATER USE</b>						
Public water features	Permitted	Permitted	Permitted, but WSAP must be prepared.	WSAP must be implemented.	WSAP must be implemented.	Not permitted.
Child care	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.
Public parks, gardens, aviaries, plant houses, zoos	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.
Schools, technical colleges, colleges, universities	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.
Hospitals, hospices, nursing homes, rehab centres	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.
Aged accommodation	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.
Motels, caravan parks, cabins	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.

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	LEVEL 1 LOW	LEVEL 2 MODERATE	LEVEL 3 HIGH	LEVEL 4 VERY HIGH	LEVEL 5 EXTREME	LEVEL 6 CRITICAL
<b>NON - RESIDENTIAL WATER USE</b>						
Hotels, registered clubs	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.
Businesses with cooling towers	Permitted	Permitted	Permitted, but business must prepare WSAP.	Business must implement and comply with WSAP.	Business must implement and comply with WSAP.	Not permitted.

## NOTES:

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### ODDS & EVENS SYSTEM EXPLAINED

- This means that if the street number of your property is odd you can water in accordance with the restrictions on odd days.
- If your property has an even number you can water in accordance with the restrictions on even days.
- If your property has a range of street numbers then it should be treated as odd or even as per the first number in the range. For example if your property is 12-15 Smith Street then you can water on even days in accordance with the restrictions.
- If your property has no street number then it should be treated as an even property. For example if your property is "Tara" then you can water on even days in accordance with the restrictions.

### OTHER SOURCES OF WATER

These restrictions are restrictions that Council is placing on the use of its potable water supply. If the restrictions say "Not permitted" for a particular use, this means that Council's potable water supply cannot be used for this purpose. Water from another source, however, could be used for this purpose.

### TIMES

The times quoted in the restrictions are based on a 24 hour clock. For example, if the restrictions state 2200 hrs it is equivalent to 10 pm.

- Summer Time - refers to Daylight Saving period 2.00am Eastern Standard Time first Sunday in October to Eastern Daylight Saving Time 3.00am first Sunday in April
- Winter Time - refers to the period outside of Daylight Saving Time

### WSAP

This refers to a Water Savings Action Plan, an enterprise specific plan to adopt water efficiency prepared in accordance with "Guidelines for Water Savings Action Plans", NSW Office of Water, October 2005. A copy of this document is now available from NSW Office of Water.

Further water restrictions may permit the continued use of water for that activity

At certain levels of restrictions a business may be required to prepare a WSAP. The completed WSAP but only if the business strictly complies with its approved WSAP.

## DEFINITIONS

- A watering system is any automated system for the watering of lawns by any means.
- A microspray irrigation system may be a manual or automatic lawn irrigation system that uses small sprays known as microsprays to irrigate lawn or gardens.
- A drip system is a surface or subsurface, manual or automatic system that uses a dripper or emitter to water lawn or gardens.
- A soaker hose is a fixed or moveable hose with a series of small openings to water lawn or gardens.

A non fixed sprinkler is an above ground sprinkler that is attached to and supplied with water from a hose or similar used, automatically or manually, with or without a timer, to irrigate lawn or gardens.

## CTW Restriction Triggers

The Triggers were developed on the basis of the following input data:

The demand forecast outcomes were based on local population of 13,493 in 2009 (source: CTW Demand Management Plan 2009)

CTW supply includes:

- Lake Rowlands Yield of 2050 ML/y (source: Review of Lake Rowlands Safe Yield, SMEC, 2010)
- Gooloogong Bore No. 1 & No. 2 combined licensed allocation of 400 ML/y
- Cudal Bore licensed allocation of 100 ML/y

Supply						Water Restrictions Levels	Demand		
Bore supplies (Gooloogong Bores & Cudal Bore)			Lake Rowlands Storage Levels		Lake Rowlands Supply		Estimated Annual Demand - All residential & non-residential (incl. leakage)		Residential Consumption per Person
%	ML/y	ML/d	% (Triggers)	ML	ML/d		ML/y	ML/d	L/ person/d

100%	500	<b>1.37</b>	<b>70%</b>	3150	<b>6.16</b>	<b>Level 1</b>	2749.0	<b>7.53</b>	269
100%	500	<b>1.37</b>	<b>60%</b>	2700	<b>5.72</b>	<b>Level 2</b>	2587.6	<b>7.09</b>	241
100%	500	<b>1.37</b>	<b>50%</b>	2250	<b>5.12</b>	<b>Level 3</b>	2370.5	<b>6.49</b>	211
100%	500	<b>1.37</b>	<b>40%</b>	1800	<b>4.42</b>	<b>Level 4</b>	2114.1	<b>5.79</b>	178
100%	500	<b>1.37</b>	<b>35%</b>	1575	<b>3.89</b>	<b>Level 5</b>	1918.9	<b>5.26</b>	155
100%	500	<b>1.37</b>	<b>30%</b>	1350	<b>3.41</b>	<b>Level 6</b>	1745.7	<b>4.78</b>	136
			20%	900	(Lake Rowlands Dead Storage)				

**Note:**

1. The above triggers are estimates and where the derived demand reduction is not achieved by introduction of the expected restriction level, the next level should be applied.
2. An assumption was made that the inflow rate to Lake Rowlands is zero.
3. Lake Rowlands has a storage capacity of 4,500 ML and has an estimated dead storage of 900 ML (source: Lake Rowlands Yield Study, CTW, 1991; Proposed Lake Rowlands Dam – Preliminary Yield Study, CTW Woodward-Clyde, 1998).
4. Council advised that climate for CTW’s supply area can be assumed to be similar to Orange. The average daily evaporation rate is assumed to be 4mm (source: Pan Evaporation Data for Orange Agricultural Institute (063254), Environmental Assessment Report – Hard Rock Quarry & Processing Plant, Hanson, 2009) Total surface area is 840,000m2 when Dam Storage @ 4,500 ML)
5. Surface area of Lake Rowlands at various storage capacities was evaluated based on the Stage-Storage record of Lake Rowlands table (source: Review of Safe Yield, SMEC 2010)

6. The demand valves are outcomes from the drought end use model.

**Lake Rowlands Supply & Evaporation Rates are estimated in the table below:**

Lake Rowlands Storage Levels	Lake Rowlands Supply		Evaporation Rate @ 4mm/d	Lake Rowlands Supply + Evaporation	No. of Days of Supply Remaining at each Water Restrictions Level	Water Restrictions Levels
	ML	ML/d				
70%	3150	<b>6.16</b>	2.35	8.51	53	Level 1
60%	2700	<b>5.72</b>	2.02	7.74	58	Level 2
50%	2250	<b>5.12</b>	1.68	6.80	66	Level 3
40%	1800	<b>4.42</b>	1.34	5.76	39	Level 4
35%	1575	<b>3.89</b>	1.18	5.07	44	Level 5
30%	1350	<b>3.41</b>	1.01	4.42	102	Level 6
20%	900	(Lake Rowlands Dead Storage)				