WATER SECURITY OUTLOOK

NOVEMBER 2016

South Gippsland Water

Dumbalk is supplied from the Tarwin River East Branch.

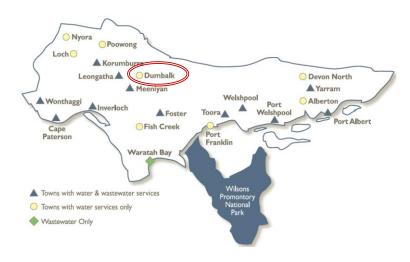
After diversion from the river, water is stored in a small water storage and water tower. This small water storage helps South Gippsland Water to maintain a good quality water supply.

South Gippsland Water

1300 851 636

www.sgwater.com.au

Dumbalk Water Supply System



Water Supply Information

Water resources held by South Gippsland Water for the Dumbalk Water Supply System are shown below. Only 4% of the available annual entitlement has been used from the river in the current year to date (Jul-Oct 2016). This entitlement is a legal right to access water, subject to availability.

Water Component	Maximum Annual	Volume Extracted	Volume Remaining
	Entitlement	2016-17	2016-17
Tarwin River at Dumbalk	100 ML	4 ML	96 ML

Water Consumption

Demands were lower than average between July and October and are expected to be similar to or below average for the remainder of the year. The five year average demands in July and August are slightly inflated due to plant optimisation works carried out in 2012/13.



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Further Information:

- records for the Tarwin River East Branch at Dumbalk show that it was flowing at an average of 64 ML/d during September. This is well above SGW's restriction trigger of 1 ML/d, but still a relatively low flow (exceeded in 85% of Septembers).
- Unregulated river flows are difficult to forecast. SGW has only forecast the next 3 months due to low forecast skill beyond 3 months. The graph is formatted to highlight low flow behaviour.
- Units are in megalitres per day (ML/d), where
 1 ML is equivalent to 1 million litres (or roughly one Olympic sized swimming pool).

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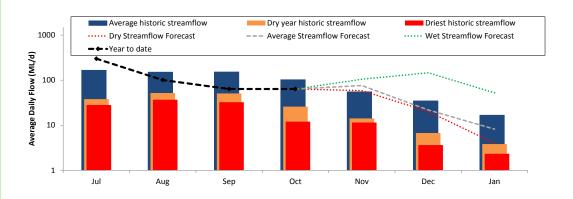
Climate Conditions

Forecast climate conditions for the coming three months have considered the Bureau of Meteorology's seasonal climate forecast for the region and local climate conditions in the year to date. The Bureau's climate outlook indicates that rainfall over the next three months is likely to be similar to the long-term average. Winter/spring rainfall in the year to date has been average to slightly below average, however rainfall in the most recent month (October) was more than 25% above average across much of South Gippsland. Air temperature is forecast over the next three months to be higher than the long-term average for this time of year, but any increase in demands from these higher temperatures is likely to be moderated by the anticipated rainfall. After taking these factors into account, South Gippsland Water is forecasting on the basis of an average climate scenario, which is characterised by streamflows in the Tarwin River that are similar to long-term average values.

Chance of Exceeding	Chance of Exceeding Median	This Year's	Likely Outlook
Median Rainfall	Maximum Temperature	Spring Rainfall	Scenario
50-55%	65-70%	Average	Average

Streamflow Outlook

Streamflows in the Tarwin River are naturally highly variable, but were generally below average in the current year period. Whilst precisely forecasting streamflow conditions is difficult, streamflows for the outlook period are currently expected to remain below the average if the average climate conditions continue as expected. Alternatively, if the low flow conditions in October continue through to summer, river flows are still expected to remain above SGW's 1 ML/d trigger for restrictions over the outlook period.





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Urban Water Restrictions Outlook

Based on the recent streamflow record, below average demands for water in the year to date, the Bureau of Meteorology climate forecast and SGW's daily streamflow forecast, no water restrictions are anticipated over the outlook period at the current time. South Gippsland Water's Permanent Water Savings Plan applies to all customers over the outlook period.

Climate Scenario	Outlook		
	1 Dec 2016	1 Jan 2017	1 Feb 2017
Wet	PWSP	PWSP	PWSP
Average	PWSP	PWSP	PWSP
Dry	PWSP	PWSP	PWSP

PWSP Permanent Water Savings Plan

Action Plan

A list of priority actions for this supply system prior to the next update of the Urban Water Strategy is presented below. Further information on actions can be found in the previous Urban Water Strategy (Water Supply Demand Strategy 2011) and Water Plan 3 publications on our website.

Action Name	Timing
Demand management	Ongoing
Reduce leaks and wastage	Ongoing
Update water security outlook	Every November

The information provided in this water security outlook is intended as a guide only. An update will be issued if conditions change during the outlook period.

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